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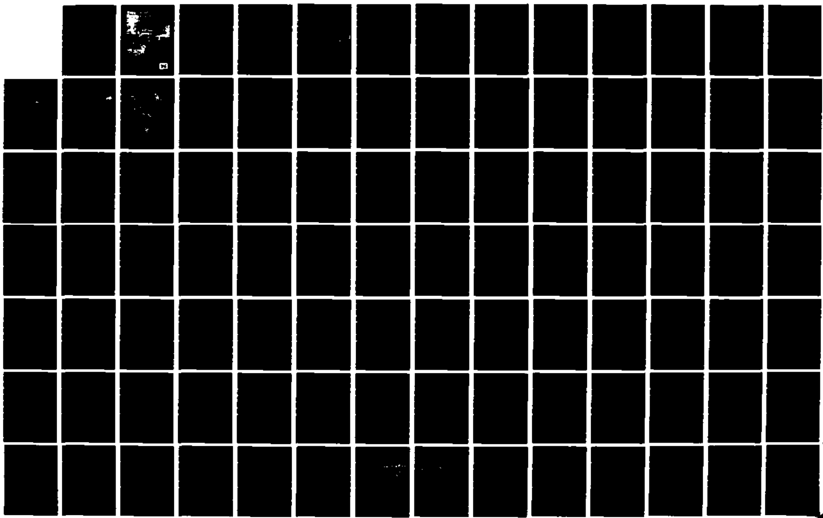

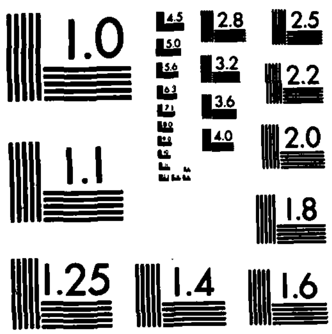
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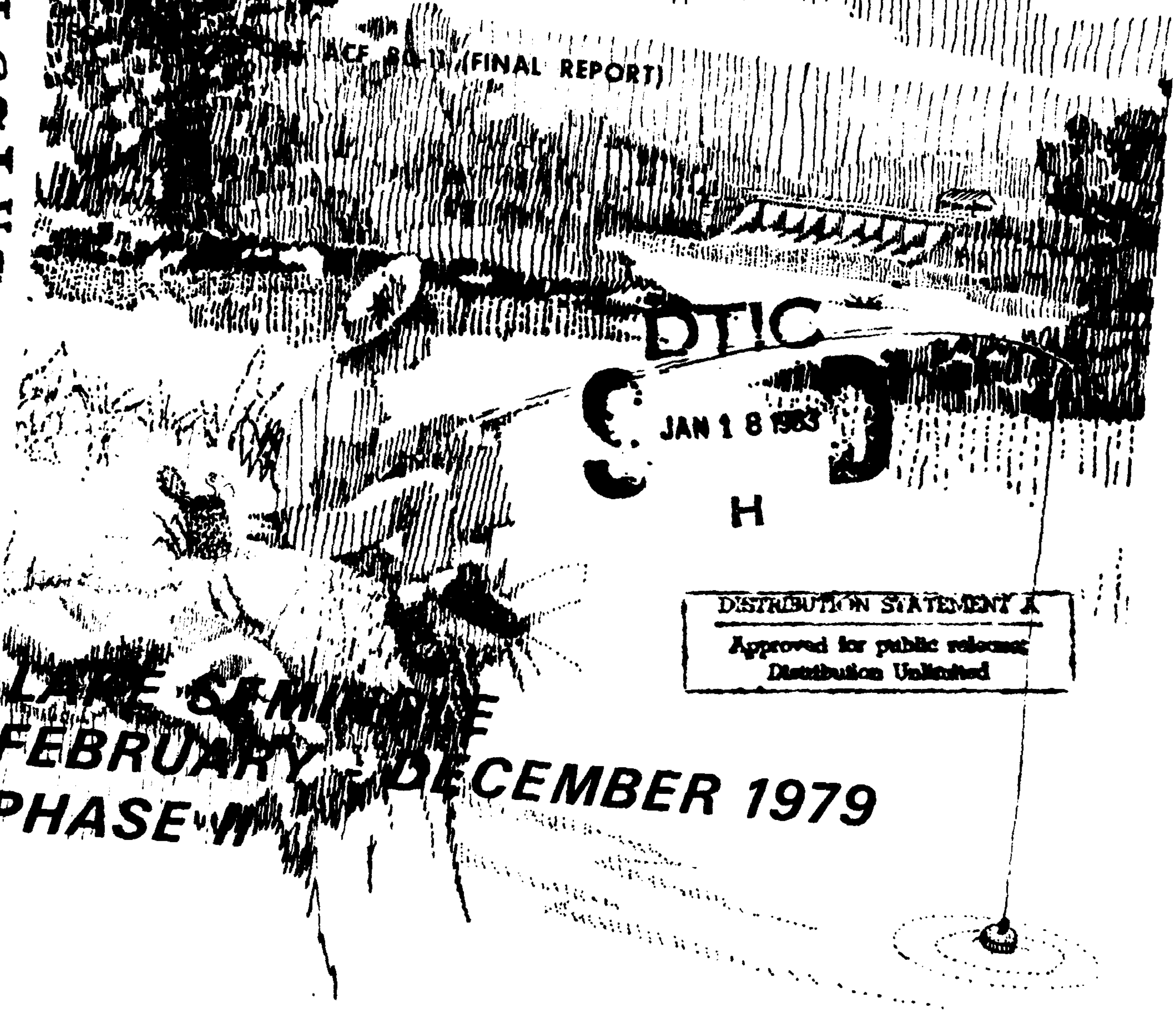
Water Quality Management Studies

(FINAL REPORT)



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LAKE SEMINOLE
FEBRUARY - DECEMBER 1979
PHASE II

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Physical, chemical sediment analyses	Plankton	Flint River
Reservoir	Benthos	Apalachicola River
Nutrients	Corbicula	Florida
Heavy metals Water Quality	Lake Seminole	Georgia Alabama

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This document presents the results of an eleven month water quality study in Lake Seminole located partially within each of three states: Georgia, Florida, and Alabama. Meterological, hydrological, sediment and physical, chemical, and biological water quality data were obtained at a total of 19 main sampling stations in Lake Seminole, the Chattahoochee, Flint and Apalachicola Rivers, Spring Creek and Fish Pond Drains during 7 sampling cycles from February through December 1979. Limited sampling and analyses were also performed at 5 special sites. Sampling and analytical methodologies are summarized and a

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brief review and analysis of the findings, including identification of major water quality problems and recommendations for future studies, are presented. The detailed results are included in attached appendices. Where appropriate, the date generated were submitted to the EPA's STORET system.

(12)

WATER QUALITY MANAGEMENT STUDIES
LAKE SEMINOLE
February-December 1979
Phase II

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December 1982

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ABSTRACT

This document presents the results of an eleven month water quality study in Lake Seminole located partially within each of three states: Georgia, Florida, and Alabama. Meteorological, hydrological, sediment and physical, chemical and biological water quality data were obtained at a total of 19 main stations in Lake Seminole, the Chattahoochee, Flint, and Apalachicola Rivers, Spring Creek, and Fish Pond Drain during 7 sampling cycles from February through December, 1979 of Phase II. Limited sampling and analyses were also performed at 5 special sites. Sampling and analytical methodologies are summarized and a brief review and analysis of the findings are presented, including identification of major water quality problems and recommendations for future studies. Comparisons are also made to data collected during Phase I (April through November, 1978) of this study (For complete Phase I data see U.S.A.C.O.E., 1981). The detailed results of Phase II are included in attached appendices. Selected data were submitted to the EPA's STORET System.

OBJECTIVES

The overall objectives of the Lake Seminole Water Quality Management Study were to a) establish base line conditions for future comparisons; b) identify water quality-environmental problems; c) collect data to allow guidance for reservoir control-discharge water quality relationships; and d) collect data that will provide conditions to facilitate coordination with state agencies to implement watershed pollution control.

Those objectives were met by taking samples for physical, chemical and biological parameters in Lake Seminole and it major tributaries, the Chattahoochee River, and the Flint River as well the lake's outfall, the Apalachicola River. The samples were analyz using standard analytical techniques, and the selected data gen ed were stored in the Environmental Protection Agency's (EPA) Data Sto and Retrieval (STORET) system.

INTRODUCTION

Jim Woodruff Lock and Dam is located on the Apalachicola River at Mile 107.6 (173.2 km.), about 305 meters downstream from the point where the Flint and Chattahoochee Rivers unite to form the Apalachicola River. The structure is an earthfill dam with a concrete fixed-crest spillway, a center channel spillway with 16 vertical lift gates 12.2 m long and 9.3 m high and a side channel navigation lock 25 m wide. The dam crosses the Florida-Georgia border with about 457 meters of the overflow dike being located in Dacatur County, Georgia, and the remainder of the structure being in Gadsden and Jackson Counties, Florida. The primary purposes of the structure are to aid navigation in the Chattahoochee River upstream to the George W. Andrews Lock and Dam at Mile 47 (76 km.), in the Flint River to Bainbridge, GA about 48 km. upstream and downstream in the Apalachicola River, and to generate electric power. Other stated benefits include the regulation of streamflows, public recreation and fish and wildlife conservation. Construction of the project was initiated in September, 1947. The lock was opened for navigation, and impounding of water in the reservoir was begun in May, 1954. The power plant was placed in operation and the pool was considered full when it reach elevation 77 ft. (23 m) msl in February, 1957 (USACOE, 1972).

Lake Seminole, formed by the impoundment behind the Jim Woodruff Dam, is located partially within each of three states: Georgia, Florida, and Alabama as shown in Figure 1. The reservoir has a total drainage basin area upstream of the dam of 44,630 sq. km., of which approximately 51 percent is tributary to the Chattahoochee River and 49 percent tributary to the Flint River. The reservoir consists of two major impoundment arms, the Flint and Chattahoochee, and two minor impoundment arms, Fish Pond Drain and Spring Creek, both of which are tributary to the Flint River Impoundment. The reservoir has a surface area of 152 sq. km. and a total volume of 439 million cubic meters at the normal pool elevation of 77.0 feet (23 m) msl. The pool extends up the Chattahoochee River 75.2 km. to the George W. Andrews Lock and Dam and up the Flint River 76 km. (USACOE, 1972).

The Flint River has a total length of approximately 560 km. and a total drainage basin area of some 21,900 sq. km. The basin extends about 346 km. from north to south and averages roughly 64 km. in width. The headwaters of the Flint River are in the hilly region of the Piedmont Province, in the vicinity of the Atlanta Airport at an elevation of approximately 305 m. Seventy miles downstream from its source the river flows through the Pine Mountain District of the Greenville Plateau. The river through this stretch descends at a rate of approximately 0.04 percent up to the Fall Line at Flint River Mile 286 (460 km.). At the Fall Line the river drops rapidly over a shoal, and for 64 km. downstream. Downstream of Flint River Mile 220 (354 km.) the river flows

FIGURE 1

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY SAMPLING STATION LOCATION MAP FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

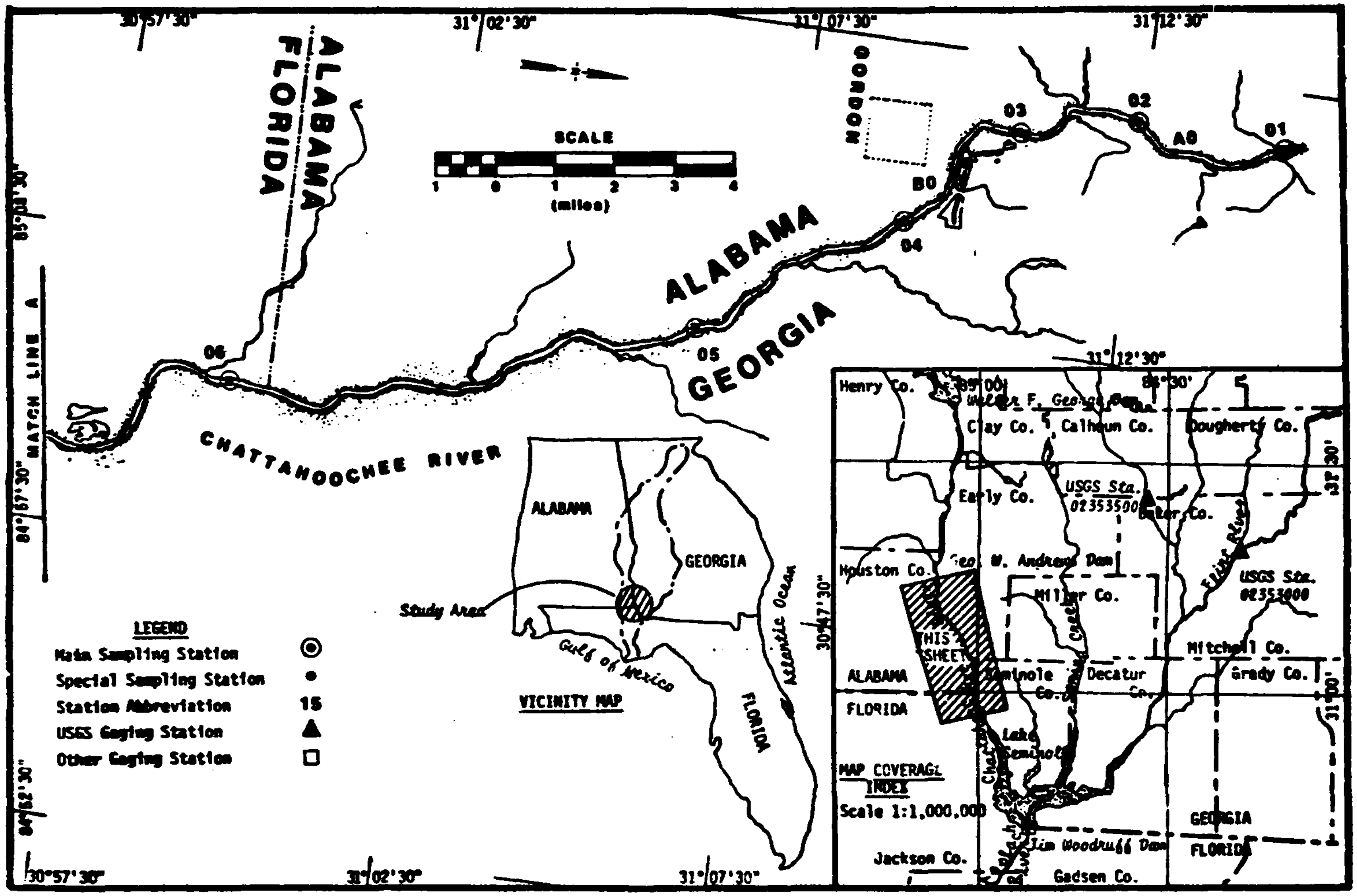


FIGURE 1 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY SAMPLING STATION LOCATION MAP FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

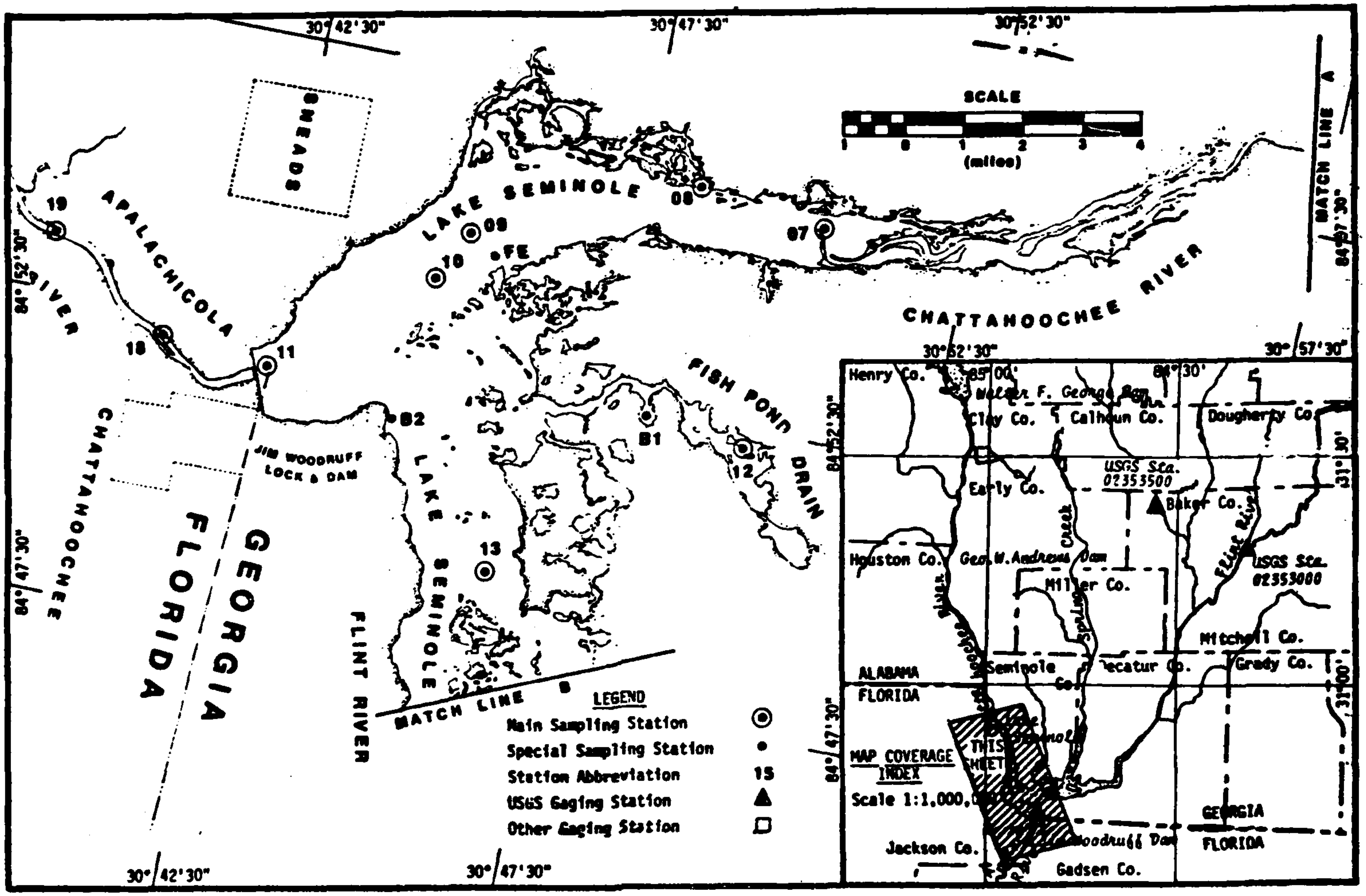
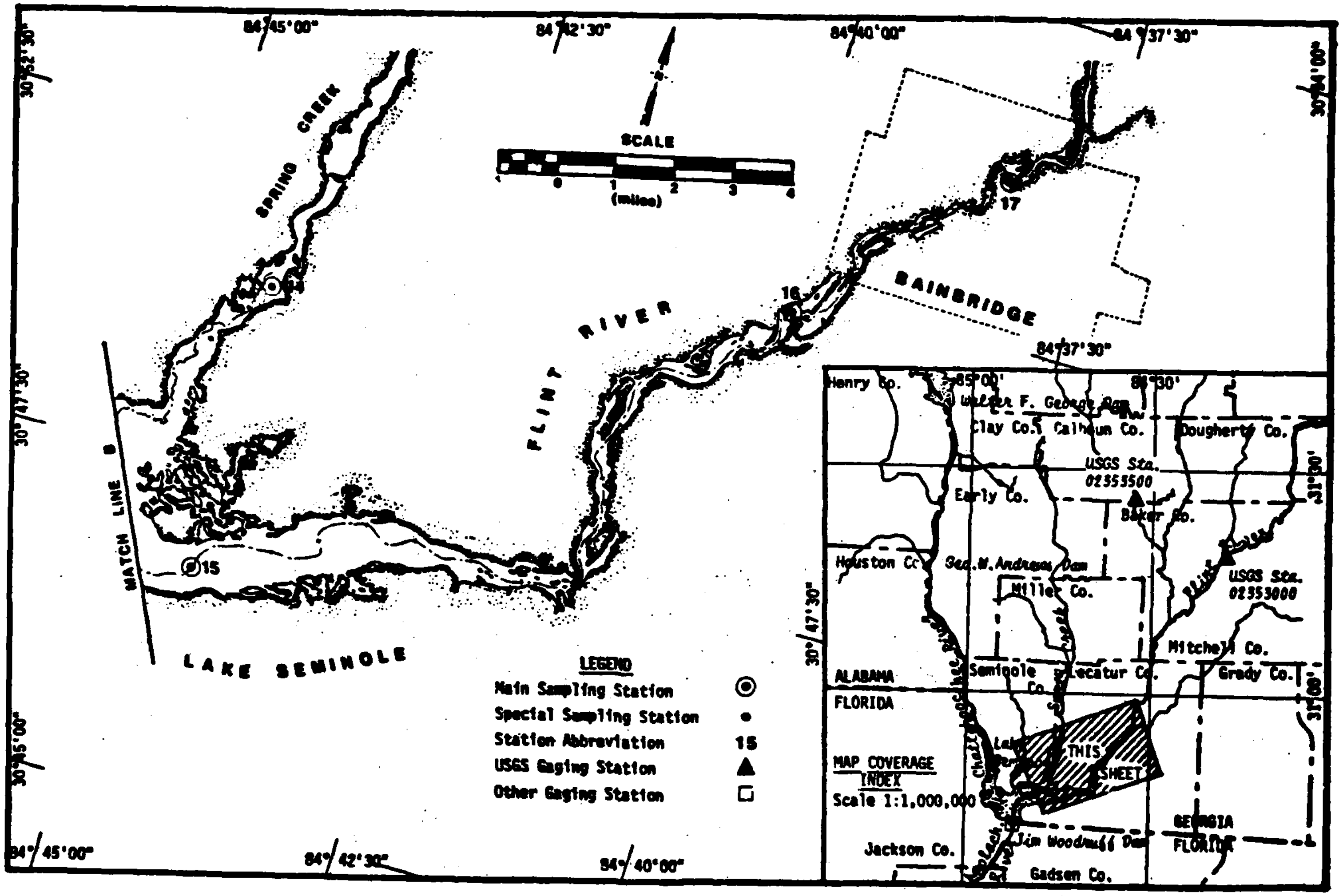


FIGURE 1 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY SAMPLING STATION LOCATION MAP FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)



through the Upper Coastal Plain of southwest Georgia until it joins the Chattahoochee River in the Lake Seminole impoundment (USACOE, 1976).

The average annual flow in the Flint River at Newton, Georgia (see Figure 1, insert) for the period of record 1938-1950 and 1956-1973 is 202 m^3/sec, with a minimum flow of 22.4 m^3/sec which occurred on both Oct. 20, and Nov. 10, 1940 and a maximum flow of 1870 m^3/sec which was recorded on March 9, 1966 (USGS, 1979).

The Chattahoochee River has a total length of approximately 1200 km. and a total drainage basin area of 22,700 sq. km. The basin extends about 410 km. from north to south. The headwaters of the Chattahoochee River are in the rugged, wooded Blue Ridge Mountains of Northern Georgia. Downstream from this area the river flows through the hills of the Piedmont Province which range in elevation from 366 m in the foothills of the Appalachian Mountains to approximately 183 m at the Fall Line. Downstream of the Fall Line the river flows through the Upper Coastal Plain until it joins the Flint River in the Lake Seminole Impoundment.

The Walter F. George Lock and Dam, located upstream of the Lake Seminole Impoundment on the Chattahoochee River at Mile 75 (121 km.) is operated as a peaking power plant and as a result there is considerable short term flow variation through the Chattahoochee River Impoundment of Lake Seminole. The average annual flow at Walter F. George Lock and Dam near Columbus, GA (see Figure 1, insert) for the period of record 1929-1978 is 192 m^3/sec, with a minimum flow of 8.3 cfs which occurred on Oct. 23, and Nov. 14, 1931 and a maximum flow of 4110 m^3/sec which occurred on Feb. 26, 1961 (USGS, 1979).

The Apalachicola River, now formed by the discharge from Jim Woodruff Dam, was originally formed by the confluence of the Flint and Chattahoochee Rivers in the extreme southwest corner of Georgia. The river is bounded on both banks by wetlands except for the upper 40 km. stretch which is bounded on the east by the Apalachicola River Bluff formation. The Mariana Lowlands extend from the western bank of the Apalachicola westward past the border of the basin and south to the Western Highlands which cut across the middle-western portion of the basin. The Tallahassee Hills occur on the eastern side of the Apalachicola from the Georgia border southward to the Coastal Lowlands. The Coastal Lowlands comprise the entire lower portion of the basin.

The river below Jim Woodruff dam decends at a rate of approximately 0.009 percent. The power plant at the Jim Woodruff Dam is a "run of the river" plant which operates around the clock except when occasional high flows reduce the available operating head causing the plant to be non-productive. There is no flood control storage available in the reservoir (USACOE, 1972). The average annual flow at the dam is 635.8 m^3/sec for the period of record Oct., 1928 to 1977, with a minimum flow of 140 m3/sec which occurred Oct. 27, 1954 and a

maximum discharge of 8300 m^3/sec which occurred on March 20, 1929 (USGS, 1978).

METHODS AND TECHNIQUES

Field Procedures

Sampling Site Locations

Sample site locations were specified by the U.S. Army Corps of Engineers (USACOE), Mobile District. The classification of sampling stations for the purpose of specifying field measurement, sediment and/or *Corbicula* sampling procedures was based in part on the total width of the cross section, the accessibility and submergence of the overbank areas as well as the inundation of the natural levees at normal pool stage. The sampling sites are shown on Figure 1, and their locations and their classifications as to river or lake station are tabulated in Table 1.

Sampling and Analytical Methodology

A complete sampling schedule showing the parameters sampled and sampling dates is shown in Table 2. A summary of the station parameter sampling schedule is shown in Table 3. A summary of the sampling methodologies, including respective maximum allowable holding times, sample container and preservation techniques as well as analytical methodologies employed and reported detection limits for the water quality parameters sampled during the course of this study can be found in Table 4.

Field Measurements

Dissolved oxygen (D.O.), pH, temperature, and specific conductance were measured at each station, one meter below the surface during every sampling cycle. To define the extent of the mixing within the river, D.O., pH, specific conductance and temperature were also sampled at depths of 0.33 meter below the surface and 1.0 meter above the river bed at midstream and within the littoral zone of both river banks at river stations 01 thru 07, 12, 14, 16, 17, 18 and 19 during the first and fourth sampling cycles (2/19-22/1979 and 7/16-19/1979). More extensive sampling including the measurement of Oxidation-Reduction Potential (ORP) at stations 7, 11 and 15 was performed during cycle 4 (7/16-19/1979) in order to develop complete cross sectional isopleths for these parameters. To define stratification, D.O., pH, specific conductance, temperature and ORP were vertically profiled at stations 07, 08, 09, 10, 11, 13 and 15 during all sampling cycles. Secchi disc and 1% light transmission measurements were also measured *in situ* at each station.

The field instruments used to sample the *in situ* parameters are listed in Table 4.

TABLE 1

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SAMPLING STATION NAME, STORET CODE, LOCATION, TYPE AND DESCRIPTION FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station Name: Abbrev.	Station Name: STORET Code	Location	Type	Description
01	13LS01	Chattahoochee River MP 45.5	River	Chattahoochee River, 1.2 miles (1.9 km) downstream of the George W. Andrews Dam
02	13LS02	Chattahoochee River MP 42.6	River	Chattahoochee River, 1.4 miles (2.25 km) downstream of power plant, 1.0 miles (1.61 km) upstream of confluence with Cedar Creek
03	13LS03	Chattahoochee River MP 40.3	River	Chattahoochee River, 0.4 miles (0.64 km) upstream of Great Northern Paper Mill dock
04	13LS04	Chattahoochee Piver MP 37.5	River	Chattahoochee River, 0.3 miles (0.48 km) upstream of Gordon Landing boat ramp
05	13LS05	Chattahoochee River MP 33.3	River	Chattahoochee River, 0.3 miles (0.48 km) upstream of Navy Yard Landing
06	13LS06	Chattahoochee River MP 25.0	River	Chattahoochee River, 1.1 miles (1.77 km) upstream of Hwy. 91 bridge
07	12LS07	Chattahoochee River MP 11.0	River	Chattahoochee River, 3.2 miles (5.15 km) downstream of channel to Parramore Landing
08	12LS08	Chattahoochee River 0.2 mile SW MP 9.1	Lake	Chattahoochee River 0.2 miles (0.32 km) southwest of milepoint 9.1; out of main channel
09	13LS09	Lake Seminole-Chattahoochee River Impoundment NUN 4.8	Lake	Lake Seminole - Chattahoochee River Impoundment, 1.0 miles (1.61 km) northeast of the Three Rivers State Park boat ramp
10	12LS10	Lake Seminole-Chattahoochee River Impoundment CAN 3.9	Lake	Lake Seminole - Chattahoochee River Impoundment, 1.5 miles (2.41 km) north of Sneads Landing boat ramp; 0.1 miles (0.16 km) south of can out of the main channel
11	12LS11	Lake Seminole-Chattahoochee River Impoundment NUN 0.6	Lake	Lake Seminole - Chattahoochee River Impoundment, 0.6 miles (0.97 km) north-northwest of the Jim Woodruff Dam lock; NUN 0.6
12	13LS12	Lake Seminole-Fish Pond Drain Impoundment	River	Lake Seminole - Fish Pond Drain Impoundment Arm, 1.8 miles (1.6 km) northeast of the Georgia SR 253 bridge. River mile index mileage to confluence with the Flint River is estimated along the original stream channel.
13	13LS13	Lake Seminole-Flint River Impoundment CAN 5.5	Lake	Lake Seminole - Flint River Impoundment, 0.6 miles (0.97 km) north of the Flint River Park boat ramp; 100 meters north of can 5.5, out of main channel
14	13LS14	Lake Seminole-Spring Creek Impoundment SW SR 253	River	Lake Seminole - Spring Creek Impoundment, 2.0 miles (3.22 km) south southwest of the Georgia SR 253 bridge. River mile index mileage to confluence with the Flint River is estimated along the original stream channel
15	13LS15	Lake Seminole-Flint River Impoundment MP 9.4	Lake	Lake Seminole - Flint River Impoundment, 1.8 miles (2.9 km) west of Hutchinson's Ferry Landing boat ramp

TABLE 1 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SAMPLING STATION NAME, STORET CODE, LOCATION, TYPE AND DESCRIPTION FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station Name		Location	Type	Description
Abbrev.	STORET Code			
16	13LS16	Flint River MP 24.0	River	Flint River, 0.6 miles (0.97 km) upstream of Fourmile Creek confluence
17	13LS17	Flint River MP 29.0	River	Flint River, 0.5 miles (0.8 km) upstream of Atlantic Coast Line RR bridge (northernmost bridge in Bainbridge)
18	12LS18	Apalachicola River NUN 104.4	River	Apalachicola River, 0.4 miles (0.64 km) downstream of Louisville & Nashville Railroad bridge; NUN 104.4
19	12LS19	Apalachicola River MP 101.5	River	Apalachicola River, 100 meters downstream of southernmost power plant docking post
A0	13LSA0	Chattahoochee River MP 43.4	River	Chattahoochee River, 0.6 miles (0.97 km) downstream of power plant
B0	13LSB0	Chattahoochee River MP 36.2	River	Chattahoochee River, 100 meters downstream of Great Northern Paper effluent outfall
B1	13LSB1	Lake Seminole-Seminole State Park Beach	River	Lake Seminole - Fish Pond Drain Impoundment Arm, 30 meters south of beach area at Seminole State Park. River mile index mileage to the confluence with the Flint River is estimated along the original stream channel
B2	13LSB2	Lake Seminole-Chattahoochee Park Beach	Lake	Lake Seminole-Flint River Impoundment. 50 meters west of the boat ramp at Chattahoochee Park
FE	13LSFE	Lake Seminole-Chattahoochee River Impoundment NUN 5.2	River	Lake Seminole - Chattahoochee River Impoundment, 0.8 miles (1.29 km) northeast of NUN 5.2; out of the main channel

TABLE 2

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameter	Sampling Cycle						
	1	2	3	4	5	6	7
	Sampling Dates (1979)						
	2/19-22	4/2-4	6/4-6	7/16-19	8/13-16	9/24-26	12/3-6
<u>Meterological Data</u>							
Air Temperature	X	X	X	X	X	X	X
Cloud Cover	X	X	X	X	X	X	X
Wind Velocity	X	X	X	X	X	X	X
Wind Direction	X	X	X	X	X	X	X
I. <u>Water Quality Sampling</u>							
<u>Hydrological Data</u>							
Total Depth	X	X	X	X	X	X	X
Stream Velocity	X	X	X	X	X	X	X
Wave Height	X	X	X	X	X	X	X
Current Speed	X	X	X	X	X	X	X
Current Direction	X	X	X	X	X	X	X
<u>Physical Data</u>							
<u>Miscellaneous</u>							
Cross-Section Loc	X	X	X	X	X	X	X
Sample Depth	X	X	X	X	X	X	X
Secchi Disk Transparency	X	X	X	X	X	X	X
Depth of 1% Surface Light	X	X	X	X	X	X	X
<u>Field Measurements</u>							
Water Temperature	X	X	X	X	X	X	X
Specific Conductance	X	X	X	X	X	X	X
Oxidation Reduction Potential	X	X	X	X	X	X	X
Dissolved Oxygen, Electrode	X	X	X	X	X	X	X
pH	X	X	X	X	X	X	X
<u>Laboratory Data</u>							
Color	X	X	X	X	X	X	X
Turbidity, Hach Turbidimeter	X	X	X	X	X	X	X
Total Filterable Residue	X	X	X	X	X	X	X
Total Nonfilterable Residue	X	X	X	X	X	X	X
<u>Chemical Data</u>							
<u>Minerals and Metals</u>							
Alkalinity	X	X	X	X	X	X	X
Chloride	X				X		X
Sulfate, Dissolved	X	X	X	X	X	X	X
Sulfide, Total			X	X	X	X	

TABLE 2 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameter	Sampling Cycle						
	1	2	3	4	5	6	7
	Sampling Dates (1979)						
	2/19-22	4/2-4	6/4-6	7/16-19	8/13-16	9/24-26	12/3-6
Chemical Data							
Minerals and Metals							
Calcium, Total	X				X		
Hardness, Total	X				X		X
Iron, Dissolved	X	X	X	X	X	X	X
Iron, Total	X	X	X	X	X	X	X
Magnesium, Total	X				X		
Manganese, Dissolved	X	X	X	X	X	X	X
Manganese, Total	X	X	X	X	X	X	X
Potassium, Total	X				X		X
Sodium, Total	X				X		X
Zinc, Total	X	X	X	X	X	X	X
Nutrients							
Carbon, Dissolved Organic	X	X	X	X	X	X	X
Carbon, Total Organic	X	X	X	X	X	X	X
Carbon Dioxide	X	X	X	X	X	X	X
Nitrogen, Total Ammonia	X	X	X	X	X	X	X
Nitrogen, Nitrate + Nitrite	X	X	X	X	X	X	X
Nitrogen, Total Inorganic	X	X	X	X	X	X	X
Nitrogen, Total Kjeldahl	X				X		X
Nitrogen, Total Organic	X				X		X
Nitrogen, Total	X				X		X
Orthophosphate, Dissolved	X	X	X	X	X	X	X
Phosphorus, Total	X	X	X	X	X	X	X
Biological Data							
Bacteriological Data							
Fecal Coliform	X		X	X	X	X	X
Fecal Streptococci	X		X	X	X	X	X
FC/FS Ratio	X		X	X	X	X	X
II. Sediment Sampling							
Mechanical Data							
Sieve Analysis					X		
Hydrometer Analysis					X		
Physical & Chemical Data							
Physical Data							
Volatile Solids					X		

TABLE 2 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameter	Sampling Cycle						
	1	2	3	4	5	6	7
	Sampling Dates (1979)						
	2/19-22	4/2-4	6/4-6	7/16-19	8/13-16	9/24-26	12/3-6
Physical & Chemical Data (continued)							
Miscellaneous Chemical Data							
Carbon, Organic					X		
Nitrogen, Total Kjeldahl					X		
Oil & Grease					X		
Phosphorus, Total					X		
Heavy Metals							
Arsenic					X		
Cadmium					X		
Chromium					X		
Copper					X		
Iron					X		
Lead					X		
Manganese					X		
Mercury					X		
Nickel					X		
Zinc					X		
III. Corbicula Tissue Analysis							
Physical & Chemical Data							
Heavy Metals							
Arsenic	X				X		
Cadmium	X				X		
Chromium	X				X		
Lead	X				X		
Mercury	X				X		
Selenium	X				X		
Zinc	X				X		
Chlorinated Hydrocarbons							
Aldrin	X				X		
Aroclor 1242	X				X		
Aroclor 1254	X				X		
Aroclor 1260	X				X		
BHC-Alpha Isomer	X				X		
BHC-Beta Isomer	X				X		
BHC-Gamma Isomer	X				X		
Chlordane	X				X		
P,P' DDD	X				X		
P,P' DDE	X				X		
O,P' DDT	X				X		
P,P' DDT	X				X		
Dieldrin	X				X		
Endosulfan Sulfate	X				X		
Heptachlor	X				X		
Heptachlor Epoxide	X				X		
Methoxychlor	X				X		
Mirex	X				X		
PCB	X				X		
Pentachlorophenol	X				X		
Toxaphene	X				X		

TABLE 2 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameter	Sampling Cycle						
	1	2	3	4	5	6	7
	Sampling Dates (1979)						
	2/19-22	4/2-4	6/4-6	7/16-19	8/13-16	9/24-26	12/3-6
IV. Biological Data (Composite Samples)							
Algal Growth Potential (Before and After Autoclaving)							
Nitrogen, Total Ammonia		X		X		X	
Nitrogen, Total Kjeldahl		X		X		X	
Nitrogen, Nitrate + Nitrite		X		X		X	
Orthophosphate, Dissolved		X		X		X	
Phosphorus, Total		X		X		X	
pH, Lab		X		X		X	
Specific Conductance		X		X		X	
Algal Counts							
12-Day Count		X		X		X	
12-Day Count, Std. Dev.		X		X		X	
14-Day Avg. Count		X		X		X	
14-Day Count, Std. Dev.		X		X		X	
Biomass Measurements							
Benthic							
Biomass, Benthic	X	X	X	X	X	X	X
Euphotic Zone							
ATP-Adenosine Triphosphate	X	X	X	X	X	X	X
Biomass, Plankton	X	X	X	X	X	X	X
Chlorophyll-a	X	X	X	X	X	X	X
Chlorophyll-b	X	X	X	X	X	X	X
Chlorophyll-c	X	X	X	X	X	X	X
Macroinvertebrates							
Benthic	X	X	X		X		X
Hester Dendy (P=Placed; R=Retrieved)	P	R	P	R	P	R	
Plankton							
Phytoplankton	X	X	X	X	X	X	X
Zooplankton	X	X	X	X	X	X	X

TABLE 3

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
STATION SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameters[1]	(A) Main Sampling Stations 01	02	03	04	05	06	07	08	09	10	11	12[9]	13	14[9]	15	16	17	18[9]	19[9]
Meteorological Data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
I. Water Quality Data																			
Hydrological Data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Physical Data																			
Miscellaneous	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Field Measurements																			
1. Surface (or Mid-Depth)[2]	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Surface and Bottom[3]	X	X	X	X	X	X						X		X		X	X	X	X
3. Vertical Profile							X	X[4]	X	X	X		X		X				
4. Complete Cross-Sectional							X	–			X				X				
Laboratory Data																			
1. Surface (or Mid-Depth)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Bottom[5]							X		X	X	X		X		X				
Chemical Data																			
1. Surface (or Mid-Depth)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Bottom[5]							X		X	X	X		X		X				
Biological Data[6] (Bacteria)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
II. Sediment Sampling	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
III. Corbicula	X		X	X				X			X	X		X	X	X			X

TABLE 3 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
STATION SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameters[1]	(A) Main Sampling Stations																		
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
IV. Biological Data (Composite Samples)																			
Algal Growth Potential						X	X		X	X	X	X	X	X	X	X		X	
Biomass Measurements	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Macroinvertebrates																			
Benthic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hester Dendy	X	X	X	X	X	X	X		X		X	X	X	X	X	X		X	X
Benthic Diversity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Plankton	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	(B) Special Stations																		
	AO	BO	B1	B2	FE[7]														
Meterological Data	X	X	X	X	X														
I. Water Quality Data																			
Hydrological Data	X	X	X	X	X														
Physical Data																			
Miscellaneous																			
Field Measurements	X	X			X														
Laboratory Data[8]	X	X			X														
Biological Data (Bacteria)			X	X															

TABLE 3 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
STATION SAMPLING SCHEDULE FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

NOTES:

1. See Table 2 for a Complete List of Parameters Sampled.

2. Unless otherwise noted, taken at mid-stream one meter below water surface or at mid-depth where total depth was less than 10 ft.

3. Unless otherwise noted, all parameters except ORP sampled 0.3 meters below water surface and 1 meter above bottom surface at mid-stream and left and right littoral zone during Cycles 1 (2/19-22/1979) and 4 (7/16-19/1979) only.

4. Originally scheduled to be sampled.

5. Unless otherwise noted, taken 1 meter above bottom during Cycles 3 through 6 only.

6. Unless otherwise noted, taken 0.3 meters below water surface.

7. Sampling at Station FE initiated during Phase I, Cycle 2 (6/5-7/1978).

8. Only Turbidity.

TABLE 4

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES, ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	I. Water Quality Sampling						
	Physical Data						
	Miscellaneous						
00077	Secchi Disk Transparency	None	--	(in situ)	#13, Secchi disk, 20 cm.	--	m
00034	Depth of 1% Surface Light	None	--	(in situ)	Protomatic Instruments underwater photometer	--	m
	Field Measurements						
00010	Water Temperature	None	--	(in situ)	Yellow Springs Instr. D.O. meter, 51B	--	°C
00094	Specific Conductance	None	--	(in situ)	Yellow Springs Instr. SCT meter, 33	--	μmho/cm @25°C
00090	Oxidation Reduction Potential	None	--	(in situ)	Photovolt pH meter, 126A & ORP	--	mv
00299	Dissolved Oxygen, Electrode	None	--	(in situ)	Yellow Springs Instr., D.O. meter, 51B	0.1	mg/l
00400	pH	None	--	(in situ)	Photovolt pH meter, Model 1269	--	std. units
	Laboratory Data						
00080	Color	24 hrs	P,G	4°C	#3, p. 36	--	Pt-Co units
00076	Turbidity	7 days	P,G	4°C	#3, p. 295	(var.)	FTU
00095	Specific Conductance				Yellow Springs Instr. SCT meter, 33	--	μmho/cm @ 25°C
00515	Total Filterable Residue	7 days	P,G	4°C	#1, p. 93	10	mg/l
00530	Total Nonfilterable Residue	7 days	P,G	4°C	#1, p. 94	10	mg/l
	Chemical Data						
	Minerals and Metals						
00410	Alkalinity, Total	24 hrs	P,G	4°C	#1, p. 278	--	mg as $CaCO_3$/l
00940	Chloride	7 days	P,G	None required	#1, p. 304	1	mg Cl/l
00946	Sulfate, Dissolved	7 days	P,G	4°C	#1, p. 496	1	mg SO_4/l
00745	Sulfide, Total	24 hrs	P,G	2 ml 2N zinc acetate /l	#1, p. 499	0.1	mg S/l
00916	Calcium, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 103	0.1	mg Ca/l
00900	Hardness, Total				Calculated	--	mg as $CaCO_3$/l
01046	Iron, Dissolved	6 mo	P,G	Filter on site, HNO_3 to pH <2	#3, p. 81, 110	0.050	mg Fe/l
01045	Iron, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 110	0.050	mg Fe/l
00927	Magnesium, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 114	0.1	mg Mg/l
01056	Manganese, Dissolved	6 mo	P,G	Filter on site, HNO_3 to pH <2	#3, p. 81, 116	0.050	mg Mn/l
01055	Manganese, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 81, 116	0.050	mg Mn/l
00937	Potassium, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 143	0.1	mg K/l
00929	Sodium, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 147	0.03	mg Na/l
01092	Zinc, Total	6 mo	P,G	HNO_3 to pH <2	#3, p. 82, 155	0.010	mg Zn/l

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES, ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	I. Water Quality Sampling (continued)						
	Nutrients						
00681	Carbon, Dissolved Organic	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#3, p. 236	2.0	mg C/l
00680	Carbon, Total Organic	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#3, p. 236	1.0	mg C/l
00405	Carbon Dioxide				Calculated	--	mg CO_2/l
00610	Nitrogen, Total Ammonia	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#3, p. 159	0.01	mg N/l
00630	Nitrogen, Nitrate + Nitrite	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#1, p. 620	0.01	mg N/l
00640	Nitrogen, Total Inorganic				Calculated	--	mg N/l
00625	Nitrogen, Total Kjeldahl	7 days	P,G	4°C, H_2SO_4 to pH <2	#3, p. 175	0.1	mg N/l
00605	Nitrogen, Total Organic				Calculated	--	mg N/l
00600	Nitrogen, Total				Calculated	--	mg N/l
00671	Orthophosphate, Dissolved	24 hrs	P,G	4°C, Filter on site	#3, p. 256	0.01	mg P/l
00655	Phosphorus, Total	7 days	P,G	4°C, H_2SO_4 to pH <2	#3, p. 249, 256	0.01	mg P/l
	Biological Data						
	Bacteriological Data						
31616	*Fecal Coliform*	8 hrs	Sterilized	4°C	#1, p. 937	--	MPN/100 ml
31673	Fecal Streptococci	8 hrs	Sterilized	4°C	#1, p. 944	--	MPN/100 ml
	II. Sediment Sampling						
	Mechanical Data						
	Sieve Analysis						
80217	Bed Mtl (% Finer than 25.4 mm)	--	P	None required	#4, D 422-63	--	
80216	Bed Mtl (% finer than 19.1 mm)	--	P	None required	#4, D 422-63	--	
80214	Bed Mtl (% finer than 9.52 mm)	--	P	None required	#4, D 422-63	--	
80213	Bed Mtl (% finer than 4.76 mm)	--	P	None required	#4, D 422-63	--	
80208	Bed Mtl (% finer than 2.0 mm)	--	P	None required	#4, D 422-63	--	
	Physical & Chemical Data						
	Physical Data						
	Volatile Solids	14 days	P	4°C	#5, p. 539	--	% total dry weight
	Miscellaneous Chemical Data						
00687	Carbon, Organic	14 days	P	4°C, H_2SO_4	#6	5	gm C/kg dry wt.
00627	Nitrogen, Total Kjeldahl	14 days	P	4°C, H_2SO_4	#5, p. 469	1.0	mg N/kg dry wt.
00557	Oil and Grease	14 days		4°C, H_2SO_4	#7, p. 42	50	mg/kg dry wt.
00668	Phosphorus, Total	14 days		4°C, H_2SO_4	#8	0.7	mg P/kg dry wt.

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES, ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	II. Sediment Sampling (continued)						
	Heavy Metals						
01003	Arsenic	3 mo	P	HNO_3	#8	0.1	mg As/kg dry wt.
01028	Cadmium	3 mo	P	HNO_3	#8	1	mg Cd/kg dry wt.
01029	Chromium	3 mo	P	HNO_3	#8	2	mg Cr/kg dry wt.
01043	Copper	3 mo	P	HNO_3	#8	2	mg Cu/kg dry wt.
01170	Iron	3 mo	P	HNO_3	#8	2	mg Fe/kg dry wt.
01052	Lead	3 mo	P	HNO_3	#8	5	mg Pb/kg dry wt.
01053	Manganese	3 mo	P	HNO_3	#8	2	mg Mn/kg dry wt.
71921	Mercury	3 mo	P	HNO_3	#8	2	µg Hg/kg dry wt.
01068	Nickel	3 mo	P	HNO_3	#8	3	mg Ni/kg dry wt.
01093	Zinc	3 mo	P	HNO_3	#8	1	mg Zn/kg dry wt.
	Chlorinated Hydrocarbons						
39333	Aldrin	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39499	Aroclor 1242	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39507	Aroclor 1254	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39511	Aroclor 1260	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39343	Benzene Hexachloride	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39076	BHC-Alpha Isomer	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
34257	BHC-Beta Isomer	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
	BHC-Gamma Isomer	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39351	Chlordane	1 mo	G	Freeze	#9	0.5	µg/kg dry wt.
39731	2,4 D	1 mo	G	Freeze	#9	2	µg/kg dry wt.
39311	P,P' DDD	1 mo	G	Freeze	#9	0.2	µg/kg dry wt.
39321	P,P' DDE	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39306	O,P' DDT	1 mo	G	Freeze	#9	0.2	µg/kg dry wt.
39301	P,P' DDT	1 mo	G	Freeze	#9	0.2	µg/kg dry wt.
39383	Dieldrin	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
	Endothol	1 mo	G	Freeze	#9	0.5	µg/kg dry wt.
39393	Endrin	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
34369	Endrin Aldehyde	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
	Glyphosphate	1 mo	G	Freeze	#9	1	µg/kg dry wt.
39413	Heptachlor	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39423	Heptachlor Epoxide	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39481	Methoxychlor	1 mo	G	Freeze	#9	0.2	µg/kg dry wt.
39758	Mirex	1 mo	G	Freeze	#9	0.1	µg/kg dry wt.
39061	Pentachlorophenol	1 mo	G	Freeze	#9	0.5	µg/kg dry wt.
39403	Toxaphene	1 mo	G	Freeze	#9	0.5	µg/kg dry wt.
	III. Corbicula Tissue Analysis						
	Physical & Chemical Data						
	Heavy Metals						
01004	Arsenic	--	P,G	Freeze	#10, p. 30	0.1	mg As/kg wet wt.
71940	Cadmium	--	P,G	Freeze	#10, p. 30	0.05	mg Cd/kg wet wt.
71939	Chromium	--	P,G	Freeze	#10, p. 30	0.1	mg Cr/kg wet wt.
71936	Lead	--	P,G	Freeze	#10, p. 30	0.1	mg Pb/kg wet wt.
71930	Mercury	--	P,G	Freeze	#10, p. 30	0.005	mg Hg/kg wet wt.
01119	Selenium	--	P,G	Freeze	#10, p. 30	0.1	mg Se/kg wet wt.
71938	Zinc	--	P,G	Freeze	#10, p. 30	1.0	mg Zn/kg wet wt.

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES,
ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

ST Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	III. Corbicula Tissue Analysis (continued)						
	Chlorinated Hydrocarbons						
39334	Aldrin	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.2	µg/kg wet wt.
[illegible]	Aroclor 1242	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	25	µg/kg wet wt.
39512	Aroclor 1254	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	25	µg/kg wet wt.
34570	Aroclor 1260	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	25	µg/kg wet wt.
39078	BHC-Alpha Isomer	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.2	µg/kg wet wt.
[illegible]	BHC-Beta Isomer	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.2	µg/kg wet wt.
[illegible]	BHC-Gamma Isomer	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.1	µg/kg wet wt.
39349	Chlordane	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
[illegible]	P,P' DDD	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
[illegible]	P,P' DDE	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
[illegible]	O,P' DDT	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
39317	P,P' DDT	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
[illegible]	Dieldrin	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.5	µg/kg wet wt.
[illegible]	Endosulfan Sulfate	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	5	µg/kg wet wt.
[illegible]	Heptachlor	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.2	µg/kg wet wt.
[illegible]	Heptachlor Epoxide	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	0.2	µg/kg wet wt.
	Methoxychlor	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	5	µg/kg wet wt.
	Mirex	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	5	µg/kg wet wt.
	HCB	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	25	µg/kg wet wt.
[illegible]	Pentachlorophenol	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	5	µg/kg wet wt.
39307	Toxaphene	1 mo	G, teflon lid wrapped in aluminum foil	Freeze	#11	5	µg/kg wet wt.

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES, ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	IV. Biological Data (Composite Samples)						
	Algal Growth Potential Before and After Autoclaving						
	Nitrogen, Total Ammonia	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#3, p. 159	0.01	mg N/l
	Nitrogen, Total Kjeldahl	7 days	P,G	4°C, H_2SO_4 to pH <2	#3, p. 175	0.1	mg N/l
	Nitrogen, Nitrate + Nitrite	24 hrs	P,G	4°C, H_2SO_4 to pH <2	#1, p. 620	0.01	mg N/l
	Orthophosphate, Dissolved	24 hrs	P,G	4°C, Filter on site	#3, p. 256	0.01	mg P/l
	Phosphorus, Total	7 days	P,G	4°C, H_2SO_4 to pH <2	#3, p. 249, 256	0.01	mg P/l
	pH	None	P,G	4°C		--	std. units
	Specific Conductance	None	P,G	4°C	#1, p. 460	--	µmho/cm @ 25°C
[illegible]	Algal Growth Potential	N/A	N/A	N/A	#12, calculated (mean of 12 and 14 day counts with no nutrients added)	--	mg/l
	Algal Counts	N/A	N/A	N/A	Coulter Model 7(Particle Counter	10	µm³/cell
	Biomass Measurements						
	Benthic						
	Biomass, Benthic	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol)) to pH 7.0-7.3), Rose Bengal	(See Text)	--	
	Euphotic Zone						
70936	ATP-Adenosine Triphosphate	6 mo	Extract immed	-20°C	#2, p. 1043	10	ng/l
	Biomass, Plankton	7 days	P,G	4°C	#1, p. 1035	1.0	gm/cu m
32211	Chlorophyll-a	30 days	Filter immed	Frozen, dark	#1, p. 1030, 1032	0.1	µg/l
32212	Chlorophyll-b	30 days	Filter immed	Frozen, dark	#1, p. 1030, 1032	0.1	µg/l
32214	Chlorophyll-c	30 days	Filter immed	Frozen, dark	#1, p. 1030, 1032	0.1	µg/l
	Macroinvertebrates						
	Benthic						
	General	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	--	
75006	Bryozoa	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	1	No./sq m
75009	Caddis	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	1	No./sq m
75018	Chaoborus	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	1	No./sq m
75021	Chironomidae	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	1	No./sq m
75024	Corbicula	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	#18 (See Text)	1	No./sq m

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES, ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	Macroinvertebrates						
	Benthic (continued)						
75027	Hexagenia	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3, Rose Bengal	#18 (See Text)	1	No./sq m
75015	Leeches	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3, Rose Bengal	#18 (See Text)	1	No./sq m
75012	Snails	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3, Rose Bengal	#18 (See Text)	1	No./sq m
75003	Sponges	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3, Rose Bengal	#18 (See Text)	1	No./sq m
	Hester Dendy						
	General	None	P	10% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3, Rose Bengal	(See Text)	--	No./sq m
	Plankton						
	Phytoplankton						
	General	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71300	Division Chlorophyta	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71322	Order Chlorococcales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71320	Order Cladophorales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71308	Order Tetrasporales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71311	Order Ulotrichales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71302	Order Volvocales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71335	Order Zygnematales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71393	Division Chrysophyta	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71400	Class Bacillariophyceae	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71394	Class Chrysophyceae	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71432	Division Cyanophyta	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES, MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES
ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

STORET Code	Parameter	Holding Time	Container	Preservation Technique	Analytical Methodology	Detection Limit	Units
	Plankton						
	Phytoplankton (continued)						
71438	Order Chamaesiphonales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
714[illegible]	Order Chroococcales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71[illegible]0	Order Hormogonales	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71377	Division Euglenophyta	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
71281	Division Pyrrophyta	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3).	#14, 15, 16, 17 (See Text)	1.0	No./ml
	Zooplankton						
	General	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71287	Phylum Arthropoda	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71[illegible]9	Larvae Crustacea	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71291	Order Cladocera	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71295	Subclass Ostracoda	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71297	Order Copepoda	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71261	Phylum Protozoa	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71259	Class Ciliata	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71263	Class Sarcodina	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
71270	Phylum Rotifera	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L
[illegible]	Zooplankton, Other	None	P	5% Formalin, (w/$Na_2B_4O_7$(sol) to pH 7.0-7.3), Rose Bengal	(See Text)	0.01	No./L

TABLE 4 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
WATER QUALITY PARAMETER STORET CODES,
MAXIMUM HOLDING TIMES, PRESERVATION TECHNIQUES,
ANALYTICAL METHODOLOGY AND DETECTION LIMITS FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

NOTE: P = Plastic or G = Glass or N/A = Not Applicable

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All field instruments (see below) are calibrated against standards or as specified and provided with spare batteries and/or chargers before being sent into the field. In addition, appropriate standard solutions were sent to the field with the instrument. All instruments were rechecked upon return; necessary maintenance and/or provision for storage was accomplished as specified by the instrument manufacturer. When in use, instruments were calibrated prior to beginning a set of measurements and at a minimum of four-hour intervals with a final check at the end. Verification of calibration was run after every 10 samples or if any unusual reading was encountered. Any anomaly was recorded.

Instrument	Routine Calibration
Dissolved Oxygen Meter	Air calibration as specified. Calibrated versus Winkler titration if problems were suspected or after any membrane change.
pH Meter	Battery check and calibration against commercially available certified buffers.
Conductivity Meter	Calibrated daily against KCl solution 0.01 demal as specified in manual. Any deviation in reading from manual specifications was recorded in notes.
Temperature Functions	Checked against mercury thermometer daily. Any deviation was reported in notes.
Current Meter	Circuit check. Daily check of zero. Yearly factory recalibration.

In situ measurements were recorded along with weather conditions in the appropriate section in the field data notes on carbonless duplicate field record as shown in Figure 2. The notes were checked for completeness before leaving each station, and initialed by the observer.

Water Quality Sampling

Unless otherwise noted, water quality sampling followed the schedules summarized in Tables 3 and 4. After the first sampling cycle of Phase I, special sampling station FE was located approximately 0.7 km. west of the location originally specified

FIGURE 2

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
TYPICAL FIELD DATA RECORD SHEET FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

WATER AND AIR RESEARCH, INC.
6821 S.W. Archer Road
Gainesville, Florida 32602
(904) 372-1500

Job: LS
Phase: II

F11 ____ Trip ____ Station ____ Sheet ____ of ____

Date 79 / / ____ Time ____

Total Depth (m) ____ X-Section Loc (% From R Bank look upstr) ____

Observer ____

IN SITU PARAMETERS F12

Cloud Cover (%) ____ Wind: Speed (MPH) ____ Dir. (°From N) ____

Wave Height (m) ____ Current: Speed (fps) ____ Dir. (°From N) ____

Secchi Disk (m) ____ 1% Light Pen. Depth (m) ____ Air Temp. (C) ____

Sample Depth (m)	Temp. (°C)	pH	Cond. ($\frac{\mu mhos}{cm}$)	DO (mg/l) Probe/Wink	±	ORP (mV)

NET PLANKTON SAMPLES F 21

Grab ____ or Vertical Tow ____ or Oblique Tow ____ (° from horiz) Tow Angle ____ Dist.(m) ____

Meter Reading: Start ____ Stop ____ Time (sec) ____

8 oz jar 1 4-5% formalin solution

HESTER DENDY SAMPLES F22

X-section location (% from R Bank Look Upstr) ____ Buoy ____ or Float ____

Placement Date 79 / / ____ Retrieval Date 79 / / ____

Container Number(s) ____ ____ ____ ____

PONAR DREDGE SAMPLES Code F23

X-Section location (% from R Bank Look upstream)	Depth (m)	Container Number(s)		

because of the inaccessibility of the original site due to submerged navigation hazards. During the second sampling cycle, station 12 was not sampled due to mechanical boat problems.

All preservatives were added to the appropriate sample containers (with the exception of containers for spiked metal analyses) prior to being sent into the field. The actual spiking of spiked metal samples was also performed in the field.

Grab Samples. Grab samples for the water quality parameters listed in Table 2 were taken at midstream one meter below the surface or at mid-depth where the station depth was less than ten feet. In addition, to define the effects of stratification, grab samples were taken at midsection one meter above the bottom at sampling sites 07, 09, 10, 11, 13 and 15 (Table 3) for complete analyses from the third through sixth sampling cycles.

The samples were collected with either a 2-liter Wildco-Beta-Plus horizontal style water sampler or a 4-liter Wildco Alpha vertical style water sampler. The samples which require filtration such as dissolved metals, dissolved ortho-phosphate and dissolved organic carbon (DOC) were filtered immediately on the boat according to the method in Table 4. The samples were then distributed to the sample containers with the proper preservative as outlined in Table 4. The sample bottle numbers were recorded on a carbonless duplicate field bottle record as shown in Figure 3. After all the bottles had been recorded and checked, they were stored as specified in Table 4, in coolers either filled with ice at 4°C or filled with dry ice for those samples which had to be frozen immediately.

Preservatives were added to most of the sample containers that require them prior to going to the field. However, the samples for the total and dissolved metals analyses, which require concentrated nitric acid (HNO_3) as a preservative were preserved in the field to reduce the amount of time the undiluted HNO_3 was in contact with the sample container. In addition, the samples used for dissolved organic carbon analyses had their preservative, sulfuric acid (H_2SO_4), added in the field to minimize the risk of organic contamination. Despite efforts to prevent any contamination in either the sampling, handling or preservation phases, a number of DOC sample values were greater than TOC values. All values were less than 10 mg C/l and in general the differences between DOC and TOC were 1 to 2 mg C/l. In all cases where DOC results were greater than corresponding TOC results, the DOC results were reported as "less than" the stated value.

Composite Samples. Composite samples for chlorophyll a, b, and c, phytoplankton, dry biomass, adenosine triphosphate (ATP), and algal growth potential were obtained by collecting a depth integrated raw water sample from either the euphotic zone, defined as the zone above the 1% light transmission level, in quiescent waters (lake stations) or from the entire water column in more turbulent waters (river stations). Samples were taken using a horizontal beta water sampler

FIGURE 3

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
TYPICAL FIELD BOTTLE LIST RECORD FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

WATER AND AIR RESEARCH, INC.
6821 S.W. Archer Road
P.O. Box 1121
Gainesville, Florida 32602
(904) 372-1500

Trip ______ Station ______ Sheet ___ of ___
Job: LS
Phase: II
Observer ______

DEPTH INTEGRATED SAMPLES Temp ______ pH ______ Cond. ______

Sample Container	No. Req'd	Preservation Technique	Container Number(s)	
1 qt. plastic jar	1	4-5% formalin soln. (phytoplankton)		
1 qt. plastic jar	1	temp. (ATP) filter-scrape →tris→ 1 oz. bottle		
2 liter (H)	1*	filter immed. onto 0.45 GF filter-freeze in dark (Black)		
1/2 liter (P)	1	4°C, dark (biomass) (Black)		
1 gal. polycarbonate	1#	4°C, dark (AGP) (Black)		
2 liter (H)	1#	4°C, dark, H_2SO_4 to pH <2 (AGP) (Red)		
1/4 liter (C)	1#	filter 0.45 washed filter HCl to pH <3 freeze (Green)		

WATER QUALITY SAMPLES F13

Sample Depth (m) ______ Surface ___ Mid-depth ___ Bottom ___

Sample Container	Req'd	Preservation Technique	Container Number(s)	
1 liter (Q)	1*	4°C, Dark (Black)		
2 liter (H)	1*or2##	4°C, H_2SO_4 to pH <2 (Red)		
1/2 liter (P)	1*	HNO_3 to pH <2 (Blue)		
1/4 liter (C)	1*	4°C, HCl to pH <3, filter on site (wf), freeze (Green)		
1/4 liter (C)	1*	4°C, H_2SO_4 to pH <2, filter on site (Red) (GFF pretreat)		
1/2 liter (P)	1*	HNO_3 to pH <2, filter on site** (Blue)		
1 liter (Q)	1*	2 ml 2 N ZnAc/1 (Brown)		
1/2 liter (P)	1##	HNO_3 to pH <2 (Blue)		
2 liter (H)	1##	4°C		

BACTERIOLOGICAL SAMPLES
Container Number(s) ______ ______ ______ ______

COMMENTS: *2 if duplicate station
**HCl to pH 1 if DO <1
#AGP Station only
##Split sample station only

at the surface and at one meter intervals until the lower limit was reached as determined above. The samples were then composited and the required aliquots for the various parameters were drawn. When the depth to be composited was greater than seven meters, samples were taken at the surface and equal spaces over the required sampling depth.

Bacteriology Sampling and Analysis

Bacteria grab samples were taken (Table 3) in two 100 ml autoclaved sample bottles at a depth of 0.3 meters below the water's surface. Analyses for fecal coliforms and fecal streptococci were run in the field according to the method shown in Table 4. Precision control was tested by duplicating the first station of each day. Results were considered consistant if the 95 percent confidence intervals for both replicates overlapped.

Sediment Sampling and Analysis

Sediment samples were collected at each station listed in Table 3 and analyzed by the method referenced in Table 4. Each station was sampled at mid X-section station location with an epoxy coated Ponar™ dredge (standard size, 9"/side). If rock was encountered such that a grab could not be obtained, a sample was obtained at another point along the X-sectional location at that station. All samples were stored as specified in Table 4.

Corbicula Sampling

Corbicula specimens were taken where available utilizing an epoxy coated Ponar™ dredge (standard size, 9"/side). A minimum of four grab sampling attempts were made at each of those stations specified in Table 3. Samples were taken at four equally spaced locations across the channel at river stations and at four locations, 90-degrees apart, along an imaginary 20-foot diameter circle at lake stations. Recovered specimens were washed prior to storage as specified in Table 4.

Other Field Sampling & Processing

Field sampling and processing methods for the algal growth potential test, phytoplankton, zooplankton, ATP, macroinvertebrates and macrophytes are discussed in subsequent sections of this report.

Storage and Shipment of Samples

All preserved water and sediment samples were stored as specified in Table 4 in coolers filled either with ice to 4°C or with dry ice for freezing. At the end of each sampling day, the samples were sent to the Water and Air Research, Inc. (WAR) lab in Gainesville via special courier, along with copies of the field notes from that day.

Laboratory Procedures

Chemical Parameters

Sample Integrity. The integrity of all samples was maintained from the moment they were received in the laboratory until the data were reported and approved. All samples were "logged in" immediately upon receipt. When feasible, preservation was also checked. Project name, parameters, sample number, and date received were recorded both in the log and on appropriate forms in the project notebook. A control sheet was used to monitor work in progress. Samples were stored as specified according to the analyses to be run, normally either frozen or at 4°C.

Samples sent to outside laboratories were also recorded as above. Date and shipping information were recorded in the project notebook. Documentation of shipment was preserved as part of the permanent laboratory record. A tabulation of bottle numbers accompanied any samples so sent. Spiked samples and duplicated samples were routinely included in the shipments as a quality control check. These control samples were not specifically identified to the subcontractor.

Analytical Methods. Chemical analyses of water, sediment, and mollusk tissue as well as bacteriological analyses of water strictly adhered to the procedures listed in Table 4. Any deviation from these specifications has been noted with the reported data.

Notes and Record Keeping. When the samples reached the laboratory, they were "logged in" immediately by date in the permanent laboratory record in a color-coded permanent project notebook. Each station was given a unique four-digit laboratory number. All notes, analysis sheets, printouts and any other lab information relative to the Lake Seminole project were also kept in the project notebook. Verification of the bottle numbers for each station by comparison with the field record was the responsibility of the lab supervisor. A tabulation of sample identification by laboratory code number, bottle number, and station number including the date sampled and the date received became a part of the permanent record. A table was made to monitor the status of the analytical effort on a given set of samples.

Analytical data sheets by analysis were prepared for groups and individual samples. These were marked with the sample identification number(s), project, date sampled, date received, and date analyzed. All analytical readings and calculations appear on these data sheets. These were turned in daily and filed in the appropriate project notebook. Any unusual appearance of the samples or results was recorded on the data sheets. These data became a part of the permanent record. All data sheets were initialed by the analyst and calculator. Recorder printouts such as autoanalyzer charts or fluorometer records were labeled according to parameter, project, date sampled and date analyzed and accompanied the data sheets which have been kept as a part of the permanent record in the project notebooks.

Sub-contracted Analyses. The list of analyses given in Table 5 were sub-contracted. Liason with each sub-contractor assured that the methods specified in Table 4 were followed in every case. Sample integrity records were maintained and spiked and duplicated samples were included in each shipment to provide quality control independent of the sub-contractor. Reports of results including quality control results were entered as a part of the permanent laboratory record. The laboratory supervisor was responsible for monitoring the analytical performance of each sub-contractor.

Calculation and Reporting of Data. Calculation of the results of analyses was accomplished as soon as possible following completion of the "hands on" work to facilitate assessment of the control exercised by standards, replicates, and spiked samples. This assessment was the responsibility of the laboratory supervisor. All calculations were shown on the analysis sheets as part of the permanent laboratory record.

Checking calculations either by the analyst or the data calculator was standard practice. It was the responsibility of the laboratory supervisor to insure that all data reported had been calculated correctly.

"In-house" data tabulations and data were stored in the project notebooks as a part of the permanent record. Notes pertaining to field data, anomalous results, or deviations from standard methods were appended to finished reports. The accuracy of such reports was the responsibility of the laboratory supervisor.

For each cycle, the complete laboratory data base was tabulated on computer coding sheets and reviewed. These sheets were turned over to the project manager for entry into the data storage-retrieval system. A xerox copy of these sheets was kept in the project notebook as a part of the permanent laboratory record.

Quality Control Assurance

The following paragraphs describe the methods and procedures employed to assure the accuracy of the field measurements and laboratory chemical water analyses results. Short cuts were not permitted and any abnormalities were brought to the attention of the laboratory supervisor immediately. This included any analytical or safety abnormality as well as instrumental malfunction, or problems in replication or spike recovery.

Calibration Checks. These checks were done before using any instrument and the calibration recorded on the analytical data sheet. Daily logs of oven, refrigerator, and incubator temperatures were maintained with this equipment.

Gravimetric Analysis. Accuracy of analytical balances was monitored with a standard weight set (coins) and results were recorded on log sheets. Calibration checks and routine maintenance is done biannually by an established contractor.

TABLE 5

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUBCONTRACTED WATER QUALITY ANALYSES FOR
PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Parameter	Subcontractor	Transmission Method
Composite Samples		
Chlorophyll a, b, & c	TSI	Bus
Water Samples		
TOC	CH2M-Hill	Courier
Dissolved Organic Carbon	CH2M-Hill	Courier
Calcium, Magnesium, Sodium and Potassium	TSI	
Sediment Samples		
Mechanical Analysis	TSI	Bus
TOC	CH2M-Hill	Courier
Mercury	TSI	Bus
Arsenic	TSI	Bus
Chlorinated Hydrocarbons, Pesticides	TSI	Bus
Mollusk Tissue		
All Parameters	TSI	Bus
Zooplankton		
Identification of all Taxa	TA	Courier

NOTES:

TSI - Technical Services, Inc., 103-7 Stockton Street, Jacksonville, Florida, 32201
CH2M-Hill - CH2M-Hill, Southeast, Environmental Laboratories, 7201 N.W. 11th Place, Gainesville, Florida, 32602
TA - Taxonomic Associates, P.O. Box 12379, University Station, Gainesville, Florida, 32604

Titrimetric Analyses. The method was checked against a standard solution daily. The results were recorded on the data sheet and as part of the accuracy control data.

Colorimetric Analyses. A standard curve of at least 3 points was run daily. More points were run if required. The results of standards were recorded on the data sheet and also as a part of the accuracy record.

Instrumental Analyses. The Atomic Absorption Spectrophotometer and the Technicon Autoanalyzer II had daily calibration curves constructed. Instrument settings were recorded on the data sheet and as a part of the instrument record.

Fluroide electrodes, pH meters, conductivity meters, and turbidimeters were calibrated as necessary and the calibration was checked after every 10 samples. The notation was entered on the data sheet that the calibration was made.

The laboratory deionized water supply's resistance was continuously monitored and maintained at 500,000 OHMS. Deionized water blanks were always included in analyses to control possible contamination from this source.

Precision and Accuracy Control. Shewhart type (USEPA, 1979) precision and accuracy control charts were maintained for all routine laboratory analyses. These charts are updated yearly using the entire data base generated by the laboratory for the preceding year's work. These charts were maintained as a permanent laboratory record.

In this study precision was also monitored by analysis of duplicate samples. A minimum of 10 percent of the total number of samples obtained during a given sampling cycle were split in the field by filling two separate containers from the same grab sample. In general, this was achieved by sampling one station in duplicate on each sampling day. One of this pair of samples was analyzed as the first sample of an analysis run; the other was run as the last analysis. An additional sample was duplicated within a given analytical set. The difference between the field duplicates was compared with the control limits on the quality control chart. If the difference exceeded the warning limits the difference between the in-house duplicate was compared. If the in-house and field differences exceeded the warning limits the whole set of analyses was repeated. If the field duplicates exceeded the warning but the in-house duplicate was in control, each of the field duplicates was run again to verify that the difference was due to sampling rather than analytical procedure.

The results of the field duplicated samples was included in each progress report and as Appendix E in this report. The sample duplicated in-house was recorded on the precision chart.

Daily monitoring of the accuracy of the analytical work was accomplished by comparing the results of recovery of known spikes from replicated spiked samples. One sample in every 10 was spiked and at least one spiked duplicated sample was included on each sample set. The difference between the recovered value for the spike versus the normal spike value was compared with the accuracy chart warning limit. If this value exceeded the warning limits the analysis for the set of samples was repeated. The results of the spike recoveries were recorded on the accuracy chart.

Spiked sample analyses were run for:

- Fluoride
- All nitrogen forms
- All phosphorus forms
- Sulfate
- Chlorides
- All metals.

In addition, two samples each sampling cycle were spiked in the field with iron, manganese, and zinc. Samples for dissolved metals for these same stations were spiked with iron and manganese. The spiked samples for total metals were split with the South Atlantic Division Laboratory (SAD). Results of these metal spike recoveries were included in each progress report.

In addition to the in-house accuracy control, quality control assurance was monitored by splitting two samples per cycle with the SAD laboratory.

Reference Samples. Environmental Protection Agency reference samples for chlorophyll a, b, and c, nutrients, BOD, major ions, and trace metals were analyzed during cycle 3 and the results compared to established values.

Bacteriological Quality Control. Control of the quality of bacteriological media was maintained by careful attention to holding times and conditions for prepared m-fecal coliform broth (96 hours at $4^{o}C$) and KF-streptococcus agar (one month at $4^{o}C$). Sterility of sample bottles and equipment was assured by monitoring autoclaving time and temperature. A heat sensitive test strip was included in each set of autoclaved material.

In the field, attention was paid to meeting holding times for bacteriological samples. Incubator temperatures were carefully monitored. One sample each day was analyzed in duplicate.

Algal Growth Potential Test Methodology

The algal assay procedure, bottle test, was performed on water

collected from 11 selected stations (06, 07, 09, 10, 11, 12, 13, 14, 15, 16 and 18) during sampling cycles 2 (-/2-4/1979), 4 (7/16-19/1979) and 6 (9/24-26/1979) in accordance with procedures specified in Miller et al. 1978. Algal growth response was indirectly measured as ash-free dry weight after 12 and 14 days incubation using a Coulter Model Z_f particle counter equipped with a near cell volume computer. The counter and cell volume computer were calibrated in accordance with the manufacturer's procedures using a 4.59 μ diameter organic particle obtained from Coulter Electronics, Inc. All counts were run using a lower threshold of 10 μm^3 to exclude debris. Calibration of the mean cell volume computer was performed each time the instrument was used. Procedures for calibrating Coulter type electronic particle counters are also included in Miller et al. 1978. A gravimetric factor to convert particle volume to ash-free dry weight was determined to be 2.8×10^{-7} μg μm^{-3} for Selenastrum capricornutum Printz under the culture conditions used. Five counted, sized suspensions were washed three times by centrifugation, transferred to tared crucible cups and dried at 70°C overnight. After weighing the dried algae, the ash content was determined after heating the material at 500°C for 1 hour. A subculture of this organism supplied from the Pacific Northwest Environmental Research Laboratory (EPA) on 4/4/78, was maintained for use during each of the algal assays.

Depth integrated samples from the euphotic zone in quiescent waters (lake stations) or from the entire water column in more turbulent waters (river stations) were collected as specified earlier. All samples were processed within three days by an autoclaving-filtration procedure to assess the amount of algal biomass which could be grown from all nutrients in the water, including those contained in filterable organisms and other particulate matter (Miller et al. 1978). Background chemical analyses for total Kjeldahl nitrogen, ammonia nitrogen, nitrite plus nitrate nitrogen, as well as dissolved ortho-phosphate and total phosphorus were performed on the samples before and after autoclaving.

The experimental design shown in Table 6 was followed to determine the nutrient availability, the primary growth limiting nutrient(s) (nitrogen, phosphorus, or trace metals) and to determine the presence of toxic substances. This procedure, outlined in Miller et al. 1978, compares the relative growth of the test alga in water spiked according to Table 6 to the growth response of the alga in unspiked lake water. Each combination as well as the lake water control was set up in triplicate for each station.

Phytoplankton Methodology

Phytoplankton was collected from a depth integrated raw water sample from the euphotic zone in quiescent waters (lake stations) or from the entire water column in more turbulent waters (river

TABLE 6

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
BASIC EXPERIMENTAL DESIGN USED TO DEFINE
NUTRIENT LIMITATIONS AND ALGAL GROWTH
POTENTIAL FOR PHASE II (FEBRUARY, 1979
THROUGH DECEMBER, 1979)

Lake water (not spiked)

Lake water + 0.05 mg P l^{-1} as K_2HPO_4

Lake water + 1.00 mg N l^{-1} as $NaNO_3$

Lake water + 0.05 mg P l^{-1} + 1.00 mg N l^{-1}

Lake water + 1.00 mg Na_2 EDTA l^{-1} as Disodium (Ethylenedinitrilo) tetraacetate

Lake water + 0.05 mg P l^{-1} + 1.00 mg Na_2 EDTA l^{-1}

Lake water + 1.00 mg N l^{-1} + 1.00 mg Na_2 EDTA l^{-1}

Lake water + 0.05 mg P l^{-1} + 1.00 mg N^{-1} + 1.00 mg Na_2 EDTA l^{-1}

stations). The water sample was depth integrated with a Van Dorn™ sampler just below the surface and at one meter depth intervals until the lower limit was reached. If the euphotic zone in quiescent waters or impoundment depth in more turbulent waters was over 7 meters deep, eight samples beginning at the subsurface were equally spaced over the required sampling depth. These were composited and a 1 liter aliquot for the station withdrawn, placed into a pre-numbered 1 liter plastic jar, and preserved with 5 percent buffered formalin (neutralized with sodium tetraborate to a pH of 7.0 to 7.3). The collection number, site, date, and time of collection were recorded for each station in a field notebook along with weather (cloud cover, wind direction, and intensity) and water conditions (surface waves, color, turbidity, and depth) and any unusual observations during sampling.

In the laboratory, the field data were transferred to a permanent log book and the samples checked against this record. Phytoplankton analysis was made by the Utermöhl (1931, 1958) method. Each sample was resuspended with a magnetic stirrer and a known aliquot (usually 20 or 40 mls) was transferred into a standardized plankton sedimentation chamber with a known settling area of 397.6 mm^2. After 24 hours of settling, the chamber was placed on a Zeiss Invertoscope "D" microscope (magnification to 1000X), and a minimum of 150 organisms were enumerated for each sample. Cell counts were made by randomly selecting microscope fields along at least two perpendicular transects of the chamber and counting all cells within each field. For colonies and filaments consisting of a large number of cells, 1/4 or 1/2 of the colony or filament was counted and this resultant number multiplied to obtain the number of cells for the entire colony or filament. Empty algal cells or diatom frustules were not included in the counts. Identified cells were recorded on standardized bench sheets and later converted to number of cells per milliliter for each taxon in the water sample using the following conversion equation:

$$\text{Cells/ml} = \frac{(CA)}{(FMV)}$$

where,

C = number of cells counted;
A = area of bottom of the counting chamber (397.6 mm^2);
F = number of fields counted;
M = area of one microscope field (0.038 mm^2); and
V = volume of aliquot settled.

All organisms were separated and identified to species where possible. The following major standard taxonomic references were used for identification: Heurck, 1896; Hustedt, 1927-1930, 1930, 1931-1959, 1949, 1961-1966; Hanna, 1933; Huber-Pestalozzi and Hustedt, 1942; Smith, 1950; Prescott, 1951; Drouet and Dailey, 1956; Bourrelly, 1966-1970; Patrick and Reimer, 1966, 1975; VanLandingham, 1967-1979;

Drout, 1968, 1973; Whitford and Schumacher, 1973. Other minor references too numerous to list were also used.

Since the classification of diatoms is based primarily on the shape and markings of the cell wall, critical identifications can only be done if the diatoms are cleaned (all organic matter removed); thereby leaving only the silica cell walls. Diatom identification was facilitated by cleaning 30 ml of the initial samples using the hydrogen peroxide method (Werff, 1953; Patrick and Reimer, 1966). This involved placing the aliquot in a 2,000 ml beaker and adding approximately 50 ml of 30 percent hydrogen peroxide. A small amount (0.1 - 0.2 g) of potassium dichromate was added (resulting in a purple solution) and in a few moments an exothermic reaction began. This resulted in a violent heating and boiling of the mixture, which oxidized all of the organic matter within the solution, including that contained within the diatoms.

Upon completion of this aqueous combustion reaction, the solution turned yellow and the mixture was then transferred to a 300 ml tall beaker, filled with distilled water, and allowed to settle 6 - 24 hours. The diatomaceous material settled to the bottom and formed a delicate flocculent layer. The sample was then decanted at least 3 times to remove the chemicals (using distilled water to refill the beaker after each decanting). The cleaned diatoms were then poured into a storage vial and enough alcohol added to make at least a 30 percent solution to inhibit growth of *fungi*.

Permanent slides were made of the cleaned diatoms with Hyrax mounting medium. Clean #1 cover slips (22 mm sq) were flooded with water containing different concentrations of the suspended diatoms and allowed to air dry at room temperature or on a low temperature hot plate. When dry, the coverslip was heated to 500°C for 5 - 10 minutes and then inverted into a drop of Hyrax on a slide. The slide was then heated for a few minutes at 300 - 400°C until the Hyrax stopped bubbling under the coverslip. This allowed time for the penetration of the diatom frustules by the Hyrax and the evaporation of the solvent. The slide was then allowed to cool while pressing the coverslip down so that it would lie flat on the slide. The Hyrax hardened rapidly and the excess along the edges was scraped off with a razor blade. The slide was then wiped clean with acetone. Initial diatom identifications were made from these slides. If identification difficulties arose in other samples during the study period, portions of these samples were also cleaned and permanent slides made to facilitate diatom identifications.

Voucher specimens of difficult taxa were sent to Dr. C. W. Reimer, Academy of Natural Science of Philadelphia (diatoms) and Dr. J. B. Lackey, Professor Emeritus, University of Florida (green and blue-green algae) for taxonomic verification. Additional outside taxonomic checks were made by the U.S. Army Corps of Engineers, Mobile District, Mobile, Alabama.

Zooplankton Methodology

Semi-quantitative zooplankton samples were collected from quiescent waters (lake stations) with a single vertical tow through the water column by using a Wisconsin style 0.5 meter diameter, 80 micron mesh weighted plankton net with an attached flowmeter. The tow was performed at a uniform speed of approximately 0.5 meter per second to minimize avoidance reactions and sampling bias. Zooplankton were collected from turbulent waters by taking an oblique tow from near the bottom to the surface while letting the boat drift with the river flow to maintain a tow angle as nearly vertical as possible. The tow angle, time, length of rope let out, and flowmeter readings were recorded. Zooplankton samples were preserved in a final concentration of 5 percent buffered formalin with Rose Bengal added in pre-numbered plastic bottles. The collection number, site, date, and time of collection were recorded for each station in a field notebook, along with weather (cloud cover, wind direction, and intensity) and water conditions (wave height, color, turbidity, and depth) and any unusual observations during sampling.

In the laboratory, the field data were transferred to a permanent log book and the samples were checked against this record. Zooplankton were identified on a compound microscope with a magnification to 400X. They were then enumerated by placing a thoroughly mixed aliquot in a Wards zooplankton counting wheel and examining it at a magnification of 20 - 60X under a stereoscopic microscope. The aliquot size (taken with a Henson-Stempel pipet) varied from 1 - 5 ml depending on the densities of organisms and detritus. All zooplankton within the chamber were identified to genus wherever practicable and enumerated except for the two dominant genera which were identified to species.

The principal taxonomic references utilized were Edmondson, 1959; Brooks, 1957; Deevey & Deevey, 1971; Marsh, 1929; and Voight, 1956. Taxonomic checks were made by the U.S. Army Corps of Engineers, Mobile District, Mobile, Alabama.

The number of each taxon in the sample was converted and reported as number per liter using the following conversion equations:

$$\text{Number of organisms/l} = \frac{AC}{BV}$$

where,

C = organism count (raw data)
A = volume of the concentrated sample;
V = volume of water passed through the plankton net; and
B = volume of the examined aliquot.

The total volume (V) was calculated as a function of the length of the water column which the net passed through:

$$V = \pi r^2 l = (3.14)(0.25 \text{ m})^2 l = l \ (0.196 \text{ m}^2)$$

with l being the length of the water column based on the flowmeter value or the length of rope let out if the flowmeter malfunctioned.

ATP Test Methodology

Sampling and Sample Preparation

At stations 01 through 19, 200 ml or more of water from the depth integrated water sample were filtered through a 0.45 µm membrane filter (Millipore). Upon completion of the filtration, the vacuum was broken just as the last of the water passed through the filter, and the filter was quickly transferred to a 150-ml Pyrex beaker containing 10 ml of boiling 0.02 M Tris buffer. The filter was placed upside down into the Tris and heated for 5 to 10 minutes at 100°C in a water bath. The beaker was then removed from the water bath, the filter scraped with a plastic policeman to loosen the filtrate from the filter into the Tris, and replaced in the boiling water for 5 min. The beaker was then removed from the water bath and cooled rapidly. The filter was held against the side of the beaker and any remaining filtrate scraped off with a plastic policeman. The filter was then discarded. The sample was then transferred to a 1-oz Nalgene (plastic) screw cap bottle, labeled with the bottle # (T___) and volume (mls) filtered, and frozen at -20°C (dry ice in the field).

When the sample was ready to be analyzed, the contents of the bottle were thawed, the sample mixed and then transferred to a centrifuge tube. The volume of sample was recorded and approximately half of the sample was transferred back to the original container (in case of errors such that a redetermination was necessary) and the remainder centrifuged. The tubes were removed from the centrifuge and the supernatant poured into a clean, labeled scintillation vial for transport to the University of Florida for determinations.

Standardization Curve

An ATP standard stock solution was prepared by weighing 119.3 mg of crystalline adenosine 5' - triphosphate-disodium salt using ATP-free glassware. The ATP was dissolved in 100 ml of fresh 0.02 M Tris buffer containing 29.2 mg of EDTA and 120 mg of $MgSO_4$ (resulting concentration of 1 mg of ATP/ml). This was dispensed in 5.0 ml aliquots in 1-oz Nalgene bottles and stored at -20°C until required.

One ATP stock bottle was thawed and 1.0 ml of the ATP stock solution containing 1 mg of ATP/ml was pipetted into a 1-liter

volumetric flask and brought up to volume with 0.02 M Tris buffer (or pipet 1 ml of stock solution into 100 ml of Tris, mix, and pipet 1 ml of this dilution into 9 ml of Tris to result in the same dilution). This solution contained 1.00 μg ATP/ml. The following serial dilutions were then made:

1.00×10^{-1} μg ATP/ml
1.00×10^{-2} μg ATP/ml
1.00×10^{-3} μg ATP/ml
1.00×10^{-4} μg ATP ml.

The calibration curve was determined by making a minimum of 3 replicate determinations of each of the serial dilutions.

Reagents

Tris Buffer: (0.02 M) (Tris (Hydroxymethyl) Aminomethane) - Dissolve 2.5 g of the buffer crystals in 1 liter of deionized water. Bring to pH 7.75 using HCl (pH meter). Sterilize by autoclaving for 30 min. at 121°C, 15 psi (103 kPa) pressure, and store refrigerated in stoppered flasks.

FLE-50: Firefly Lantern Extract (Luciferase/Luciferin Reaction Mixture) - Reconstitute by adding 35 ml (or 37.5 ml) of low response water to one vial of extract. The luciferase/luciferin reaction mixture must be mixed gently without shaking. Allow to stand at room temperature (23 - 26°C) for one hour. Filter through Whatman #1 filter paper and store in an ice bath for 3 hours before use. Use enzyme preparation within 8 hours of preparation.

Hydrochloric Acid (0.2 N): Add 17.0 ml of HCl (sp. gr. 1.19) to a 1-liter volumetric and bring to volume with water.

ATP-Free Glassware: Rinse chemically clean glassware three times with 0.2 N HCl, rinse three times with Tris buffer, and rinse three times with low-response water.

Low-response Water: Sterile, deionized, ATP-free water may be prepared by treatment in a suitable system involving carbon treatment with deionization, filtration, glass distillation, or sterilization by autoclaving and stored under refrigeration in stoppered flasks.

Determination

One ml of reconstituted firefly lantern extract (35.0 ml low response water/vial of extract) was pipetted into a scintillation vial and the background light emission read. Using a Packard Tri-Carb Model 2002 liquid scintillation spectrometer (gain set at 53, window opening of 50 to 1,000, and set in a repeat count mode, with each

sequence) the normal background emission was 10 to 20 counts or less in the 6-sec counting interval.

Exactly 0.5 ml of the ATP standard or sample extract was added using the micropipette syringe (with new tip each time) and the vial swirled to thoroughly mix the contents. Eleven seconds after the sample addition to the firefly extract, the vial was inserted into the counting chamber and the counting sequence begun. Two samples from the beginning of the run were repeated at the end of each run to determine repeatability and check for decay of the firefly lantern extract during the run. For each cycle in Phase II, samples were analyzed for each of the 19 stations except during the last two cycles due to the loss of eight samples from September and eleven samples from December. These samples were inadvertently disposed of during storage before the analyses were done.

Macroinvertebrate Methodology

Benthic Natural Substrates

Benthic macroinvertebrate grab samples were collected at all nineteen locations. Sampling frequency was as outlined in Table 2 At the riverine stations, one sample was collected in the thalweg and one near each river bank. At lake stations 08, 09, 10, 11 and 13 samples were collected from three locations, taken 120 degrees apart, along an imaginary 20-foot diameter circle.

Benthic macroinvertebrates were collected with a standard size (9"/side) Ponar™ dredge. The dredge was lowered from the side of the boat, using a boom and power winch, slowly enough that a minimal "shock wave" was created so as not to disturb the benthos. Once the dredge touched bottom, the closing mechanism was immediately tripped and the dredge quickly raised to the surface. The dredge was then placed in a sieve bucket (US Standard No. 30 mesh) and the sample washed out with a squirt bottle filled with lake (or river) water to reduce the sample volume. The washed sample was then placed in a pre-numbered bottle (wide mouth, plastic, 1-pint or 1-quart).

Upon completion of all replicate sampling at a given station, buffered formalin preservative was added to a concentration of 5-10 percent, depending upon the quantity of detritus present. Rose Bengal was added as an organism stain to facilitate sorting, being added prior to preservation in order that the organisms' respiratory processes increased the amount of staining. The rose bengal was applied as a dry crystal, in a quantity sufficient to stain the sample a dark red, this quantity being variable according to sample size and the amount of detritus in the sample.

Upon return to the lab, the samples were shelved in an orderly manner and their numbers recorded and checked against the numbers in the field notes. Samples which were accidentally misrecorded, or which were otherwise in error, were discarded.

In the laboratory, each sample was carefully washed in a US Standard No. 30 mesh sieve (or smaller, if organism loss was significant) that was partially immersed in a large white plastic pan. This removed formalin, excess Rose Bengal stain, and the remaining silt and clay. The sample was then placed, in manageable aliquots, in a white enamel pan for removal of organisms (sorting). Organisms were placed in 5 milliliter vials in 95 percent ethanol. Each vial was labeled with a code representing the project, collection date, type of substrate sampled, collection location, and replicate bottle number. For example:

LSN-3-18E

Project Code and Substrate --	Collection Date --	Station No.
(Lake Seminole,	(third cycle:	(18 East Bank)
Natural Substrate)	June 1979)	

A vial with ethanol was weighed, the sampled organisms were then placed in the vial, and the vial was re-weighed. The difference between the two values was considered "wet weight" biomass. These numbers are high, however, due to the introduction of extra ethanol when inserting the organisms. Limited experiments suggesting errors as high as 25-33 percent were found at stations with relatively low biomass.

Organisms were identified with an American Optical Stereoscopic Microscope (7X to 80X) and a Swift Trinocular Microscope (40X to 400X). Taxonomic references used were Beck (1962, 1976), Beck and Beck (1969a and b; 1970), Curry (1958), Hilsennoff (1975), Mason (1973), Parrish (1968), Roback (1963, 1969), Brinkhurst and Jamieson (1971), Brown (1972), Edmunds, et al. (1976), Holsinger (1972), Thompson (1968), Usinger (1956), Wiggins (1977), and Saether (1977). Taxonomically difficult and ecologically important species were identified or verified by experts in their respective fields: William Beck, Florida A&M University, for Chironomidae and Michael Loden, Louisiana State University for Oligochaeta. Other authorities were consulted for the less frequent taxa, and for specific groups within the Insecta (such as Dr. Minton J. Westfall, University of Florida, for Odonata). Additional outside taxonomic checks were made by the U.S. Army Corps of Engineers, Mobile District, Mobile, Alabama.

The Chironomidae and Oligochaeta were grouped under low magnification and representative specimens were selected for microslide mounts, from which the identifications were made. Only one organism was mounted per microslide. Chironomids were mounted in polyvinyllactophenol, which contains a clearing agent and makes excellent semipermanent slides. Oligochaetes were permanently mounted in Coverbond™, which does not contain a clearing agent. Organisms can be removed and remounted, if necessary, with either of these mounting media.

The Shannon-Weaver Species Diversity Index, $\bar{H}$ (Odum, 1971) was calculated using the following expression:

$$\bar{H} = \sum_{i=1}^{t} \left[\frac{n_i}{N} \log_2 \left(\frac{n_i}{N} \right) \right]$$

where n_i = total number of organisms present as taxon $\underline{i}$

$N = \sum_{i=1}^{t} n_i$ = total number of organisms present in the sample

t = number of taxa present in the sample

$\bar{H}$ ranges from a minimum of 0.0, occurring when all organisms belong to the same taxon (no diversity), to a maximum of $\log_2 N$, occurring where each organism present belongs to a unique taxon (maximum diversity).

Evenness (e)

If the organisms of a sample are uniformly distributed among the taxa present, the Shannon-Weaver Index assumes the value, ln t, a condition of perfect evenness in the apportionment of individuals among species. The Index of Evenness, e (Odum, 1971) was used to express the actual Shannon-Weaver Index as a fraction of this "ideal" value:

$$e = \frac{\bar{H}_e}{\ln(t)} \quad \text{(defined for } t > 1\text{)}$$

where $\bar{H}_e$ = actual Shannon-Weaver Species Diversity Index

t = number of taxa present in the sample

Evenness ranges from 0.0 (minimum evenness) to 1.0 (perfect evenness), and the calculated values are independent of the logarithmic base.

All samples were retained for reference until being sent to the Mobile District COE office at the end of the study. A few chironomid larvae and oligochaetes were donated to Mr. William Beck, Jr., and Dr. Michael Loden, for their taxonomic value.

Hester-Dendy Artificial Substrates

The Hester-Dendy sampler used was that which is recommended for EPA biologists. It consists of fourteen 7.5-cm diameter plates, and twenty-four 2.5-cm diameter spacers, constructed of 0.625-cm thick tempered fiberboard, strung together on a 25-cm eyebolt so that there are 8 single spaces, one double space, two triple spaces and two quadruple spaces between the plates. This sampler has an effective surface area of 0.12 square meter.

Artificial substrates were emplaced at all stations except 08, 10, and 17. The samplers were attached to marker buoys and incubated for a period of six weeks. The sampling frequency is outlined in Table 2. Each sampler was collected by raising it from the water and quickly placing it into a cloth bag, which was then preserved in a 5-gallon Roper™ bucket containing a 10 percent buffered formalin solution. These samplers were not re-used, as it was very difficult to remove the formalin from the fiberboard.

In the laboratory, the cloth bag was everted into a US Standard No. 30 mesh sieve placed in a white enamel pan. The sampler was then removed and disassembled. The bag, sampler, and organisms were rinsed to remove the formalin and accumulated sediments. All organisms were removed and placed in vials containing 95 percent ethanol. Each vial was labeled and the organisms identified as outlined in the previous section.

Shannon-Weaver and Evenness values for the Hester-Dendy macroinvertebrates were calculated as described above.

Macrophytes

Aquatic macrophytes in Lake Seminole were surveyed in June and September, 1978 and in April and August, 1979. The macrophyte surveys were conducted to map their extent, to obtain pressed specimens, to collect reference photographs, to develop species lists, and to determine their nuisance potential.

The reservoir was surveyed from a flat-bottomed boat for 3-4 days during each of the four field trips. Included were personnel from WAR and USACOE personnel at Lake Seminole. The vegetation map was

constructed from notes collected during field inspections. Specimens of selected "uncommon to rare" species were collected when in flower. These were pressed and duplicate herbarium sheets were prepared for delivery to the USACOE personnel at Mobile, AL. Reference photographs were taken in 35 mm color slide form and are being held at WAR. Species identifications and lists were made *in situ* by survey personnel. The primary taxonomic references were Radford, *et al.* (1964), Long and Lakela (1971), and Fassett (1940). The nuisance potential of aquatic macrophytes in the lake was determined by interviews with USACOE biologists, local residents, USACOE publications (USACOE; 1961, 1971, 1972, 1973, 1974, 1975, 1977a, 1977b, 1978), and by inspection.

The vegetation map was very difficult to construct for several reasons. First, appropriate aerial photography, which is the single most important tool for mapping vegetation, was unavailable. Second, the USGS Quadrangle maps, which were relied upon in lieu of aerial photos, are incorrect in many places, especially concerning the reservoir islands. Third, vegetative diversity is very high. And fourth, mapping the dense periphyton mats occurring in the shallow waters of the Flint River portion of the reservoir is dependent on the use of bottom topographic maps, which were unavailable to us.

Several compromises were made as a result of these problems. Shoreline vegetation, usually a mix of several to many species, was not shown in many places since it occurs in too narrow a band to show in the chosen map scale. This problem was most pronounced with the fringe of giant cutgrass around many islands and in the Chattahoochee River. Also, small patches of invading nuisance species, such as *Egeria* at the Georgia Ranger Station, are too small to show up in the chosen map scale. The periphyton mats are not shown at all.

RESULTS AND DISCUSSION

The following discussion is intended to summarize the data shown in Appendices A through M and highlight the trends and water quality observed during the seven sampling cycles of Phase II of the Lake Seminole Water Quality Management Study. Brief references and comparisons are also made to the data from Phase I (1978 data) where appropriate. For greater detail on Phase I results and discussion, see U.S.A.C.O.E., 1981.

Stream Flows

Data was obtained from the United States Geological Survey (USGS) in Doraville, Georgia, for the Flint River at Newton, Georgia (USGS Station 02353000) and the Ichawaynochawa Creek (a tributary of the Flint River) at Milford, Georgia (USGS Station 02353500). The location of the flow gaging stations are shown on the Map Coverage Index of Figure 1. Data for the flow through Jim Woodruff Lock and Dam and Walter F. George Lock and Dam were obtained from the U.S. Army Corps of Engineers, Mobile District. The data for Ichawaynochaway Creek, the Flint River, and the Chattahoochee River Stations represent flows outside the actual study area.

A summary of the available stream flow data is given in Appendix A. Monthly average stream flows for which there are data are shown for the Chattahoochee and Flint Rivers, Ichawaynochaway Creek, and the flow through Jim Woodruff Lock and Dam. Daily averages for one week prior to and the week of each sampling cycle are also shown.

In general, the data shows wide variations in flow from day to day on the Chattahoochee River due to fluctuations in discharge from Andrews Lock and Dam. The Flint River is not subject to these wide daily variations. Based on monthly average flows, the Chattahoochee accounted for approximately 50 to 70% of the total flow reaching Lake Seminole.

The period of highest flow occurred during sampling cycle 2 in April. Monthly average flows for April 1979 were 849 m^3/sec at Walter F. George Lock and Dam on the Chattahoochee, 368 m^3/sec on the Flint River at Newton, Georgia, and 1,518 m^3/sec through Jim Woodruff Lock and Dam.

Water Quality Data

Complete *in situ* and laboratory water quality results are given in Appendices C and D respectively. Water temperatures were generally highest during cycle 5 in August. The mean temperature for this cycle for Chattahoochee River stations (01,02,03,04, 05,06) was 28.2°C; for Flint River stations (16 and 17), 27.8°C; for lake stations (08,09,10,11,13,15), 29.2°C; and for stations on the

Apalachicola River, 28.8°C. Station 12, on a wide, shallow, relatively stagnant arm of the reservoir had a water temperature of 27.5°C during this cycle and station 14 on Spring Creek was 27.0°C. However, at stations 12 and 14 the water temperature was highest during cycle 4 in July being 30.0°C and 29.0°C, respectively. All of these temperatures are within 1°C of the maximum temperatures found during Phase I. Minimum temperatures were encountered during cycle 1 in February with reservoir and river stations having temperatures of 7.5°C-10.5°C. Stations 12 and 14 had temperatures of approximately 13°C at this time. However, the temperature was lowest (11.0°C) for these two stations during cycle 7 in December. At no time during this study was a well defined thermocline evident at any of the lake stations sampled due probably to the shallowness of the reservoir and wind mixing of it. However, during cycle 3 (June), cycle 4(July), and cycle 5 (August), a slight (i.e., 1-2°C) surface warming was apparent at most lake stations. The greatest vertical variation gradient was observed at station 11 during cycle 4 with a difference of 4°C between the top and the bottom (Appendix F). No significant lateral thermal variation was observed during the fourth sampling cycle in July.

In general the D.O. levels found during Phase II were very similar to those found during Phase I. No anaerobic conditions were encountered at any sampling sites during any of the sampling cycles. The most severe dissolved oxygen depletion occurred during cycles 4, 5, and 6 in July, August, and September, respectively, due probably to reduced mixing and increased temperature. Dissolved oxygen during these summer months averaged about 7 mg/l (Appendix F) and ranged from a high of 12.3 mg/l one meter below the surface at station 15 to 4.2 mg/l five meters below the surface at station 11 just upstream of the dam (see Figure 1). Vertical profiles and D.O. isopleths for cycles 3 through 7 showing the variation in D.O. with depth and cross-section, respectively, at a given site are shown in Appendix F. In general, the reservoir stations exhibited a decrease in D.O. with depth during the late summer months; however, a marked thermocline did not develop and mixing from top to bottom was not inhibited. No significant lateral or vertical variation in dissolved oxygen was evident at any of the river stations during either the February or July sampling cycles with the exception of station 14 in Spring Creek during July. The variation found at this station (Appendix C) was probably due to the lack of current and mixing. At station 1 (just below the George W. Andrews Lock and Dam) the D.O. ranged from above 9.5 in February, April and December to a low of 7.3 at midstream in July. At station 18 (just below the Jim Woodruff Lock and Dam) the D.O. ranged from above 8.5 in February, April, and December to a low of 6.6 in July and September at midstream.

pH values for all stations during all the Phase II sampling cycles ranged from 6.8 to 8.9 at one meter below the surface. This compares with 6.7 to 9.1 during Phase I. During June and August, stations 11, 13, and 15 had a vertical variation in pH of 0.5 to 0.8 units but a horizontal variation of 1.5 units measured one meter below the surface.

The reverse was true of station 15 which had only a 0.2 horizontal pH variation but a vertical variation of 0.5 to 1.4 units at the various locations sampled (Appendix F). The remainder of the lake stations had no significant variation in pH. No significant lateral or vertical variation in pH was evident at any of the river stations during either cycle 1 in February or cycle 4 in July when extensive measurements were made (Appendix C).

All oxidation-reduction potentials (O.R.P.) in this report have been referenced to the Pt/H_2,H system. In general, O.R.P.'s ranged from +280 mV to +590 mV for all stations during all Phase II sampling cycles (Appendix C). This range compares favorably to Phase I levels when the range was from about +300 mV to about +600 mV for all stations during all cycles. An exception to this trend was station 80, just below the Great Southern Land and Paper Company outfall on the Chattahoochee River, Mile 38.2. Here the O.R.P. dropped sharply during cycles 1, 3, and 4 to values ranging from +6 to +170 mV. According to the values in Appendix D, the slight variation in other parameters measured at this station (water temperature, conductivity, dissolved oxygen, and pH) do not correspond or account for the changes in O.R.P. O.R.P. levels were also lower at this location during Phase I, ranging from +60 to +290 mV during cycles 2, 3, 5, and 6.

Turbidity over all the cycles during Phase II was highest for the Chattahoochee stations with a mean value of 11.1 FTU. The mean value for the Flint River stations was 6.8 FTU, the reservoir stations 10.5 FTU, and the Apalachicola stations 9.7 FTU. Turbidity at station 12 on Fish Pond Drain averaged 1.6 FTU and station 14 on Spring Creek averaged 3.7 FTU. Suspended solids concentrations, secchi disc, and percent light transmission exhibited the same general areal trends as turbidity. These same trends were also observed during Phase I.

Specific conductance, total dissolved solids (T.D.S.) and alkalinity all followed the same general areal patterns during both Phase I and II. All three parameters were lowest at the Chattahoochee River sampling sites (01-06), and generally higher on the Flint River arm of the reservoir. Station 14 on Spring Creek yielded the highest values for all three parameters for all the sampling cycles, except during cycle 3 of Phase II when alkalinity was higher in the Flint River.

Total iron concentrations were fairly high at times compared to the EPA criterion (U.S. EPA, 1976) and exhibited several areal and chronological trends. In all cases, the total iron was composed primarily of insoluble forms and followed the same trends observed during Phase I. Concentrations in the Chattahoochee were highest during cycle 2 in the spring, with values ranging from 1.2 mg/l to 3.5 mg/l. There was a general downward trend after the second cycle until cycle 6 in September when the values ranged from 0.3 mg/l to 0.6 mg/l. December showed the beginning of another upward trend. Concentrations in the Flint River were highest during the third sampling cycle with values ranging from

1.5 mg/l to 1.6 mg/l, and lowest during the fifth cycle in August with values around 0.5 mg/l. Concentrations in the reservoir were higher during cycles 1 through 3 and then dropped off during the remainder of the year except in September when they reached a mean peak of 1.3 mg/l. Spring Creek and Fish Pond Drain had much lower concentrations. In the Apalachicola River the concentrations were again highest during cycle 1 and were approximately 1.2 mg/l. The concentrations then declined to 0.7 mg/l during cycle 5 in August. It should be noted that concentrations of total iron at most of the stations during the spring and early summer months exceeded the suggested EPA criterion of 1.0 mg/l for fresh water aquatic life (U.S. EPA, 1976).

Concentrations of manganese and zinc were low at all times with concentrations never exceeding 0.2 mg/l during both Phase I and Phase II. There were no obvious areal patterns. Neither Georgia nor Alabama have numerical criteria for zinc or manganese.

Total inorganic nitrogen (TIN) concentrations were very similar during Phase II compared to Phase I and followed the same trends. Total inorganic nitrogen, composed primarily of nitrate-nitrite, was generally highest on the Flint River stations during the entire phase with values ranging from 0.49 mg/l to 0.78 mg/l. The Chattahoochee River and the reservoir stations were highest in the spring, decreased over the summer, and rose again in the fall. Mean values in the Chattahoochee ranged from a low of 0.13 mg/l in August to a high of 0.51 mg/l in February. In the Apalachicola River, values followed the same trend with a high concentration of 0.41 mg/l during cycle 1 to a low concentration of 0.12 mg/l in August. Total phosphorus values were generally much lower during Phase II than during Phase I. During Phase II, all values were between 0.01 and 0.07 mg/l. Stations in the reservoir and in the Chattahoochee and Flint Rivers showed no significant areal variation. In the Apalachicola River all values were $\leq$0.05 mg/l. Station 12 on Fish Pond Drain had extremely low values of both TIN ($\leq$0.12 mg/l) and total P ($\leq$0.002 mg/l). Station 14 on Spring Creek showed low total phosphorus (<0.03 mg/l) but high TIN (0.38-0.57 mg/l). Dissolved orthophosphate values comprised a low percentage of the total phosphorus concentration, usually less than 20 percent, except in the Flint River where it comprised 50-80 percent of the total. Total Kjeldahl nitrogen and total organic nitrogen also showed no significant areal variation during either cycles 4-6 of Phase I or cycles 1, 5, or 7 of Phase II.

Color (measured in PT-CO units) was fairly uniform throughout the reservoir and on the Apalachicola, Chattahoochee, and Flint Rivers during both Phases I and II. However, values were slightly lower in the fall (August-December cycles) and also generally lower at stations 12 and 14.

All dissolved sulfate values were less than 15 mg SO_4/l during both Phases I and II. The Flint River generally had lower levels

(mean 2.4 mg SO_4/l) than the Apalachicola River, Chattahoochee River, or the reservoir stations. In both Spring Creek (station 14) and Fish Pond Drain (station 12), all values were less than 6 mg SO_4/l and most values were less than 1 mg SO_4/l.

During Phase I and Phase II there were no distinctive trends in measured carbon dioxide levels. However, there was a tendency for CO_2 levels to be higher at all stations during the last cycle of both Phase I and Phase II. The highest values (10.8 and 13.6 mg CO_2/l) were found at staitons 16 and 17, respectively, during December, 1979.

Chloride and total potassium, sodium, calcium, hardness, and magnesium were only sampled during cycles 4 and 6 in Phase I and cycles 1, 5, and 7 in Phase II. Values for chloride ranged between 3 mg Cl/l and 7 mg Cl/l with no areal trends observed. Total potassium values were less than 2.8 mg K/l at all stations except during December, 1979, when values ranged from 1.8 (station 11) to 13.6 mg K/l (station 17). Total sodium values ranged from 1.15 to 13.4 mg Na/l. There was a slight reduction in level in the Flint River and at stations 12 and 14 compared to levels in the Apalachicola River, Chattahoochee River, and at the reservoir stations. The Chattahoochee River had lower total calcium mean concentrations than the rest of the stations. Values for all stations ranged from 2.3 to a high value of 35 mg Ca/l at station 14 in December, 1979. Total magnesium showed no distinctive trends. All values were between 0.2-7.5 mg Mg/l during both Phase I and Phase II with the low and high value occurring at stations 12 and 15, respectively, during August, 1978. Total hardness followed the same trend as calcium. The lowest values were found at the Chattahoochee River stations and the highest values at station 14 in Spring Creek.

Bacteriology

Bacteriology results for Phase II are included in Appendix D. In Phase II, samples were collected for fecal coliform and fecal streptococci during all sampling cycles except cycle 2. Samples were collected at all the water quality sampling stations plus two stations near public park facilities, B1 and B2. Due to bad media and/or equipment malfunctions, bacteriological results are incomplete for stations 07 through 11, 18 and 19 in August and stations 01 through 05, 11, and 13 through 19 in December. Station B2 was not sampled in July due to boat problems. Although a complete set of data was not obtained, enough data were obtained to establish several trends which followed the same patterns found during Phase I. Generally the Chattahoochee stations were rather low in fecal coliforms with most stations under 50/100 ml during Phase II except during cycles 1 and 5 when values ranged up to 390/100 ml. The Flint River stations were significantly higher, especially during cycle 1 of Phase II when the count reached

1405/100 ml at station 17. Coliform counts during Phase I were also significantly higher in the Flint River with the highest concentration of 2,500/100 ml at station 17 during cycle 2 of Phase I. Reservoir stations as well as Spring Creek, Fish Pond Drain and stations B1 and B2 were all low in coliforms. State standards for coliforms are 1000/100 ml in Georgia for waters classified for fishing and 200/100 ml in Florida for Class II waters. Coliform counts did exceed these standards several times throughout the study. During both Phase I and Phase II, fecal strep counts tended to be highest on the Apalachicola and Chattahoochee Rivers and low in the reservoir itself except during cycle 6 of Phase II when counts were as high as 2700/100 ml at station 10. Fish Pond Drain, Spring Creek, and the Flint River also had low values generally. Fecal coliform to fecal strep ratios as shown in Appendix D tend to indicate that human sources of contamination predominate on the Flint; and agricultural sources on the Chattahoochee and Apalachicola Rivers.

Sediments

Complete surface sediment data tabulations and gradation curves for stations 01-19 during cycle 5 are presented in Appendix L.

Physically, the surface sediments in the Chattahoochee, Flint, and Apalachicola Rivers are sands and sandy loams with the sediments at stations 18 and 19 in the Apalachicola River containing a significant gravel component. Surface sediments in the reservoir range from sand at station 13 to loam and sandy loam at stations 08, 09, 10, and 14 to silt loam at station 11. A summary of the physical characteristics as well as the USDA Textural classification of the sediments at each station is presented in Table 7.

In general, total organic carbon content and the percent loss on ignition (i.e. volatile solids) were closely related to the physical nature of the sediments. Both total organic carbon and loss on ignition were inversely related to the sand and gravel content. Those stations composed primarily of sands and gravels had TOC values ranging from 0.051 to 9.26 gm C/kg dry weight and percent loss on ignition values from 0.1 to 1.5 percent. Those stations with sediments characterized as loams had corresponding TOC values ranging from 17 to 64.6 gm C/km dry wt. and percent loss on ignition values of 6.6 to 11.3 percent. Sediment nutrient concentrations, as measured by total Kjeldahl nitrogen and total phosphorus as well as oil and grease levels were correlated to the TOC of the sediment and thus, the sediment physical characteristics. Highest nutrient levels were found at reservoir stations 08, 09, 10, 11, 13, and 15 and at station 14 in

Spring Creek during both Phase I and Phase II. For these stations during Phase II, total Kjeldahl nitrogen ranged from 337 mg/kg at station 13 to 4960 mg/kg at station 14. Total phosphorus ranged from 31.3 mg/kg at station 11 to 424 mg/kg at station 10.

Metal analyses were run on the sediments as As, Cd, Cr, Cu, Fe, Pb, Mn, Hg, Ni, and Zn. In general, sediment heavy metals concentrations were highest at reservoir stations with a higher silt and clay faction, i.e. at stations 08, 09, 10, 11, 13, and 15. Mean concentrations at these stations ranged from 1.2X (Cu) to 2.8X (As) the overall mean concentration and from 1.4X (Hg) to 27X (Cu) mean concentrations observed at the Chattahoochee and Flint River stations, i.e. stations 01, 02, 03, 04, 05, and 07 and stations 16 and 17, respectively. With the exceptions of Cr at station 14 and Hg at station 12, highest metals concentrations were observed at reservoir stations 10 (Mn), 11 (As, Cu, Fe, Pb, Ni, and Zn) and 13 (Cd). Generally, metals concentrations were lowest at stations in the Chattahoochee, Flint, and Apalachicola Rivers with sandy substrates. Average metal concentrations tended to be slightly lower in the Chattahoochee River than either the Flint or Apalachicola River. At the sites in Fish Pond Drain and Spring Creek, i.e. stations 12 and 14, respectively, concentrations of metals in the sediments exhibited no apparent pattern, with levels ranging between the extremes.

Pesticide concentrations were generally below detection limits although levels of the PCB Aroclor 1254 and the DDT metabolite p,p-DDE were detected at a number of sites. At these sites, PCB levels from 16 to 64 μg/kg were found at stations 02, 08, 09, 17, 18, and 19 with the highest level at station 19. During Phase I, detectable PCB Aroclor 1254 levels ranged from 38.7 to 753 μg/kg at stations 07, 08, 10, 12, 14, 16, and 17 with the highest level at station 14. DDE levels from 1.1 to 5.4 μg/kg were detected at stations 05, 08, 10, 13, 14, and 15 with the highest level at station 14. During Phase I, p,p-DDE was below the detection level at all stations. In contrast to Phase I when detectable levels of 2-4D were found at stations 01, 03, 06, and 09, no detectable 2-4D was found at any stations during Phase II. Due to the limited pesticide sampling, no definite trends can be ascertained.

Corbicula

Corbicula were found only at station 19 during cycle 5 of Phase II in August. Heavy metals and chlorinated hydrocarbon analyses were conducted on the sample. The results of these analyses are shown in Appendix K. Of the four heavy metals for which tissue analyses were performed, a Food and Drug Administration (FDA) Action Level has been established only for mercury. This level is 1.0 ppm for shellfish. approximately five times above the level found at station 19 during Phase II. During Phase I, all of the levels found in the samples from August were at least an order of magnitude below the FDA Action Level. During Phase I, the Corbicula sample at station 19 had 40.0 μg/kg wet wt. of chlordane and 10.0 μg/kg wet wt. of endosulfan sulfate in August.

TABLE 7

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
DESCRIPTION AND CLASSIFICATION OF SEDIMENTS FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station	%Sand (.05-2mm)[1]	%Silt (.002-.05mm)	%Clay (<.002 mm)	U.S.D.A. Textural Classification [Chow, 1964]	D_{60}[2] (mm)	D_{10}[3] (mm)	U[4]	%Gravel (>#4 Sieve)	%Fines (<#200 Sieve)
01	98	1	<1	Sand	0.60	0.18	3.3	<1	2
02	99	<1	1	Sand	0.75	0.25	3.0	<1	1
03	99	1	<1	Sand	0.80	0.33	2.4	<1	1
04	94	1	1	Sand	0.81	0.25	3.2	1	2
05	85	1	1	Sand	0.93	0.32	2.9	6	1
06	98	1	1	Sand	0.72	0.25	2.9	<1	2
07	95	4	1	Sand	0.21	0.10	2.1	0	8
08	35	43	21	Loam	0.045	<0.001	>45	0	80
09	37	46	17	Loam	0.049	<0.001	>49	0	77
10	39	44	17	Loam	0.040	<0.001	>40	0	97
11	28	55	17	Silt Loam	0.040	<0.001	>40	0	98
12	94	5	1	Sand	0.30	0.075	4.0	0	9
13	91	6	3	Sand	0.16	0.06	2.7	0	12
14	49	49	3	Sandy Loam	0.053	0.032	1.7	0	93
15	51	41	8	Loam	0.064	0.004	16	0	69
16	67	32	1	Sandy Loam	0.80	0.33	2.4	<1	2
17	98	1	1	Sand	0.68	0.20	3.4	0	2
18	66	2	1	Sand[5]	1.4	0.36	3.9	26	3
19	45	1	2	Sand[5]	4.8	0.40	12	39	3

NOTES:

1 Source: Chow, 1964
2 D_{60} = diameter at which 60% of the particles are finer than the value shown.
3 D_{10} = diameter at which 10% of the particles are finer than the value shown.
4 $U = D_{60}/D_{10}$ = uniformity coefficient.
5 Includes a significant gravel component.

During August of Phase II, both of these parameters were below the detection limit at station 19. An FDA Action Level for fish of 0.3 ppm has been established for chlordane. This level is over 7 times the highest level observed at any station during Phase I (FDA, 1979).

Algal Growth Potential

The ability of the waters of Lake Seminole to support algal growth was measured three times during Phase II of the project. Eleven stations (Table 3) were analyzed during cycle 2 (April), cycle 4 (July), and cycle 6 (September). All flask counts were completed for cycle 2. However, during cycle 4 some of the flasks were not counted at day 14 because they had either turned achlorotic or a fungus was observed to be present. In September, a procedural error was made resulting in contamination of the culture flasks with nutrients from the stock culture. The test was concluded and then rerun with the remaining water. For stations 9, 10, 11, 15, and 16 some of the EDTA spiked replicates were omitted due to insufficient sample volume remaining. Growth was also very poor in September and may have been due to a decline in the physiological condition of the test organisms. The complete data base including background water quality analyses of the nitrogen and phosphorus forms and concentrations occurring in the samples assayed for algal growth potential are shown in Appendix G. The AGP results submitted to the Environmental Protection Agency's Data Storage and Retrieval System (STORET Code 70988) consists of the mean of the average of the 12 day and 14 day growth in the unspiked water. In general the chemical analyses showed that dissolved ortho-phosphate was released from the condensed phosphate fraction during autoclaving. Total inorganic nitrogen (TIN) also increased slightly in many of the samples due to autoclaving. Most of these increases were due to ammonia released from the organic nitrogen fraction. Total Kjeldahl nitrogen and total phosphorus decreased slightly in most samples after processing except during cycle 6 when increase was noted.

In general, the condensed phosphorus and organic nitrogen fraction was not used for algal growth. Results of the replicated spiked and unspiked samples counted at 12 and at 14 days agreed within the ± 20 percent precision considered acceptable for the results of this type of assay except in September. However, due to lack of sufficient sample, the test could not be repeated.

Table 8 summarizes the overall mean algal growth potential and primary limiting nutrient as determined by analysis of nitrate, orthophosphate and EDTA spikes. Except in September when it was in the moderate range, the algal biomass produced in the unspiked lake water is indicative of moderately high to high productivity as defined by Miller et al. 1974. These authors surveyed algal growth potential in 49 lakes and set up four categories of relative productivity based on algal growth potential:

Low	0 - 0.1 mg l^{-1}
Moderate	0.11 - 0.8 mg l^{-1}
Moderate High	0.8 - 6.0 mg l^{-1}
High	6.0 - 20.0 mg l^{-1}

TABLE 8

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF ALGAL GROWTH POTENTIAL RESULTS FOR
PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Algal Growth Potential (mg l^{-1})[1] and Primary Limiting Nutrient(s) (N or P)[2]		
Station Number	Cycle 2 April 2-4, 1979	Cycle 4 July 16-19, 1979	Cycle 6 Sept. 24-26, 1979
06	7.84(P)	8.81(P)	0.63(P)
07	6.03(P)	6.65(P)	0.22(P)
09	7.19(P)	5.17(P)	0.38(P)
10	7.37(P)	4.15(P)	0.19(P)
11	5.62(P)	3.68(P)	0.19(P)
12	(3)	1.64(N,P)	0.14(P)
13	11.4(P)	2.34(P)	0.26(P)
14	1.74(P)	1.53(P)	0.45(P)
15	9.95(P)	7.56(P)	0.39 (4)
16	10.4(P)	11.1(P)	0.56(4)
18	8.47(P)	4.20(P)	0.18(P)

NOTES:

[1]Mean of both 12 and 14 day counts with no nutrients added.

[2](N) = Limited by total inorganic nitrogen.
(P) = Limited by available phosphorus.

[3]Station not sampled.

[4]Unable to determine due to inconsistent growth.

Comparing the algal growth potential categories with trophic state as defined by other characteristics, Miller et al. 1974 found that lakes with moderately high or high algal growth potential were classed as eutrophic.

The algal growth potential in the reservoir proper (stations 09, 10, 11, 13, and 15) decreased over the course of the summer. Algal growth potential at station 18, below the dam, followed the pattern of the reservoir stations. Stations 12 and 14, located in relatively isolated areas of the reservoir showed a much lower algal growth potential than the reservoir or the river stations.

The stations located upstream in both the Flint (station 16) and Chattahoochee (stations 06 and 07) Rivers generally had higher algal growth potentials than the stations located in the main body of the reservoir. No toxic responses were evident in the algal assay data at station 16 even though other biological population measurements (phytoplankton, ATP, zooplankton) suggest that a toxic impact may limit plankton population development in the reach below Bainbridge. If a toxic factor is present at station 16 it is apparently removed by autoclaving and/or filtration.

The results of nitrate, phosphate and EDTA spiked tests show that trace metals do not limit algal growth response. Areal differentiation of the primary limiting nutrient occurred during the course of the summer during Phase I. In the spring the entire reservoir was phosphorus limited but many areas became nitrogen limited over the course of the summer months. During Phase II however, this trend was not observed and phosphorus remained the limiting nutrient throughout the year.

Phytoplankton

In general, the Lake Seminole phytoplankton counts show what one would expect (Fogg, 1975) in an impoundment system and generally showed the same trends observed during Phase I. During the February and April sampling periods, the water temperature ranged from 7.5^{o} to 22^{o}C. Diatoms made up the largest percentage (88 and 74 percent during February and April respectively) of the phytoplankton association with *Melosira distans* being the most abundant (Appendix H). *Asterionella formosa*, which prefers cooler water (Werner, 1977), was also found during these months (Appendix H).

As the water temperature increased during the summer to a maximum of 27 to 30^{o}C during August, there was a shift in the algal plankton association from diatoms which prefer temperatures below 30^{o}C to blue-green algae which can grow well above 34^{o}C (Werner, 1977). During August, blue-green algae made up 75 percent of the plankton association (Table 9). This compares very well with the results of Phase I during which the blue-green algae made up 76 percent of the plankton association in August and September.

TABLE 9

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF PHYTOPLANKTON COUNTS BY MAJOR DIVISION FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Cycle 1 Feb. 19-22, 1979		Cycle 2 April 2-4, 1979		Cycle 3 June 4-6, 1979		Cycle 4 July 16-19, 1979		Cycle 5 Aug. 13-16, 1979		Cycle 6 Sept. 24-26, 1979		Cycle 7 Dec. 3-6, 1979	
Taxa	Cells/ml[1]	Percent[2]	Cells/ml	Percent	Cells/ml	Percent	Cells/ml	Percent	Cells/ml	Percent	Cells/ml	Percent	Cells/ml	Percent
CHLOROPHYTA	6,486	7	13,958	10	25,059	22	25,708	11	24,799	9	24,024	17	22,814	31
CHRYSOPHYTA	77,009	88	106,586	75	29,626	26	55,411	23	43,945	16	30,206	21	24,202	32
Chrysophyceae	565	1	171	0	304	0	195	0	445	0	188	0	48	0
Bacillariophyceae	76,441	88	106,415	74	29,192	26	55,038	23	43,446	16	29,974	21	24,144	32
CYANOPHYTA	3,413	4	21,600	15	57,643	51	159,771	66	206,147	75	89,186	62	27,433	37
EUGLENOPHYTA	129	0	188	0	433	0	202	0	264	0	221	0	25	0
PYRRHOPHYTA	30	0	160	0	181	0	141	0	231	0	55	0	31	0
TOTALS	87,067	99	142,492	100	112,942	99	241,233	100	275,386	100	143,692	100	74,505	100

NOTES: 1. Cumulative cell density (Cells/ml) for all stations per cycle.
2. Percent of total cumulative cell density for all stations per cycle.

During both Phase I and Phase II, there were no observed algal blooms of only one or two species. The lack of a definite spring and/or fall phytoplankton bloom may have been the result of the high turbidity in the system since this is a known turbidity effect (Werner, 1977). Instead there was a gradual phytoplankton increase from an average of 4,582 cells/ml in February to 15,299 cells/ml in August (again comparing well with an average cell density of 13,540 cells/ml during August of Phase I). In general, the phytoplankton densities in the Chattahoochee River were higher than in the reservoir during February, September, and December while the reverse was true during the summer sampling periods (Table 10). As noted in the Phase I report, the phytoplankton densities were extremely low at stations 16 and particularly 17. The reason for this is still unknown. Further study upstream of station 17 to mile 37.0 in the Flint River resulted in densities comparable to those at station 17.

Of the diatom species found during both Phase I and Phase II, most were characteristic of water with a pH near 7.0 (Lowe, 1974; Patrick and Reimer, 1966, 1975). Only a few frustules of genera characteristic of low pH (acidic water) such as Eunotia, Tabellaria, and Pinnularia were found. These were probably washed into the system from a tributary or in runoff.

A complete listing of phytoplankton cell densities by taxa at each station is given in Appendix H.

Zooplankton

The results of the Lake Seminole zooplankton counts for Phase II are shown in Appendix I. These results are summarized in Table 11 by major zooplankton groups for each cycle. During Phase II, zooplankton were most abundant during cycle 7 in December with a mean station concentration of 67 organisms/l. As shown in Table 11, the population density was composed primarily of Rotifera during all cycles except 3 and 6. This compares favorably with Phase I during which Rotifera comprised 50-91 percent of the total from July through November.

At stations 16 and 17 on the Flint River there was a marked reduction in zooplankton densities (Table 12) similar to that shown for phytoplankton. Further study upstream of station 17 to mile 37.0 resulted in densities comparable to those at stations 16 and 17. The reason for these low densities is unknown. Zooplankton densities at station 14 on Spring Creek were also lower than densities found throughout the rest of the system. At the reservoir stations, zooplankton were most abundant during the summer months when phytoplankton were also abundant.

ATP Test Results

The ATP concentration from the depth integrated water sample at each station ranged from 20 ng/l to 725 ng/l during Phase II. The highest value was found at station 19 during the June sampling period.

TABLE 10

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF PHYTOPLANKTON COUNTS BY STATION FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Cycle 1 Feb. 19-22, 1979 - 150 Unit Count				Cycle 2 April 2-4, 1979 - 150 Unit Count			
Sta. No.	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]
01	153	501	8,731	16	150	332	4,963	22
02	151	400	5,103	17	156	299	5,210	22
03	150	402	5,837	11	153	374	7,522	16
04	151	454	5,519	20	151	364	5,443	24
05	157	531	7,118	16	150	380	7,950	19
06	154	413	5,020	19	153	307	4,866	23
07	153	439	6,371	20	155	502	7,288	23
08	151	415	9,044	20	155	494	11,745	24
09	153	493	9,550	19	160	618	26,936	22
10	152	391	8,891	20	151	676	23,572	22
11	151	435	6,689	28	153	568	15,631	20
12	152	332	816	41	---**			
13	152	168	198	40	153	373	1,742	32
14	152	198	421	42	157	266	750	56
15	152	231	227	45	151	393	1,866	38
16	66*	77	90	34	152	285	493	39
17	39*	60	54	24	152	258	260	39
18	153	441	4,904	21	153	484	8,165	26
19	154	172	2,643	18	151	441	8,538	21

NOTES:

[1]See Appendix H.
*Less than 150 units counted per sample due to paucity of organisms and much silt in samples.
**Not sampled due to boat problems.

TABLE 10 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF PHYTOPLANKTON COUNTS BY STATION FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Cycle 3 June 4-6, 1979 - 150 Unit Count				Cycle 4 July 16-19, 1979 - 150 Unit Count			
Sta. No.	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]
01	151	381	3,829	28	152	636	9,238	32
02	151	264	2,462	30	151	781	11,341	45
03	152	285	4,514	24	154	1,209	23,415	32
04	156	298	2,597	23	152	1,100	13,078	37
05	152	512	6,374	18	---**			
06	151	447	5,436	23	---**			
07	153	635	8,972	27	152	874	9,329	35
08	151	654	8,340	33	152	1,384	22,616	35
09	161	434	7,320	41	153	1,155	19,487	42
10	156	372	4,858	42	153	877	19,942	43
11	151	520	11,337	44	152	722	13,017	40
12	151	1,773	7,988	46	153	406	1,307	51
13	151	779	9,700	37	156	925	60,470	27
14	151	585	2,424	52	153	396	2,250	46
15	152	957	10,428	43	150	391	14,606	26
16	151	424	407	49	156	408	2,013	43
17	54*	155	138	32	151	322	536	36
18	152	577	9,426	38	153	769	16,758	38
19	153	554	7,063	47	151	493	3,962	44

NOTES:
[1]See Appendix H.
*Less than 150 units counted per sample due to paucity of organisms and much silt in samples.
**Samples not collected.

TABLE 10 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF PHYTOPLANKTON COUNTS BY STATION FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Cycle 5 Aug. 13-16, 1979 - 150 Unit Count				Cycle 6 Sept. 24-26, 1979 - 150 Unit Count			
Sta. No.	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]
01	160	712	17,734	22	150	685	11,939	37
02	156	1,052	26,200	23	154	865	11,596	36
03	154	1,081	29,750	29	152	761	9,947	43
04	156	853	31,862	27	153	753	13,122	39
05	153	656	12,705	29	152	981	17,099	36
06	152	789	14,737	29	155	718	10,726	37
07	151	1,134	18,527	40	154	680	12,262	45
08	152	880	9,589	39	151	678	8,056	39
09	150	1,013	12,038	42	153	418	3,587	37
10	154	1,285	19,202	43	152	733	6,963	37
11	160	1,244	19,716	45	152	641	7,977	44
12	151	540	755	53	153	424	342	38
13	151	914	23,898	28	156	612	7,618	28
14	---*				151	251	1,007	43
15	157	704	18,408	24	153	402	1,482	35
16	154	346	3,018	25	151	270	3,715	19
17	151	377	2,898	11	151	189	729	16
18	152	665	7,716	49	152	695	9,318	36
19	151	1,105	7,602	44	150	767	6,364	40

NOTES:
[1]See Appendix H
*Sample not counted due to excessive flocculent material.

TABLE 10 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF PHYTOPLANKTON COUNTS BY STATION FOR PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

	Cycle 7 Dec. 3-6, 1979 - 150 Unit Count			
Sta. No.	Units/ Count	Cells/ Count	Cells/ ml.	No. Taxa[1]
01	153	722	9,438	39
02	152	648	6,051	43
03	153	585	5,995	37
04	153	518	5,112	38
05	152	434	4,123	30
06	155	445	4,152	36
07	161	587	6,975	32
08	154	478	5,432	33
09	156	648	6,274	33
10	153	424	4,929	39
11	155	482	5,145	37
12	152	439	570	34
13	154	304	2,409	26
14	151	207	380	39
15	152	240	752	24
16	65*	73	66	26
17	50*	93	82	17
18	152	384	3,348	29
19	153	534	3,701	32

NOTES:
[1]See Appendix H
*Less than 150 units counted per sample due to paucity of organisms and much silt in samples.

TABLE 11

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF ZOOPLANKTON COUNTS BY MAJOR PHYLA FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Taxa	Cycle 1 Feb. 19-22 Organisms/100 l[1]	Per-cent[2]	Cycle 2 April 2-4 Organisms/100 l	Per-cent	Cycle 3 June 4-6 Organisms/100 l	Per-cent	Cycle 4 July 16-19 Organisms/100 l	Per-cent	Cycle 5 Aug. 13-16 Organisms/100 l	Per-cent	Cycle 6 Sept. 24-26 Organisms/100 l	Per-cent	Cycle 7 Dec. 3-6 Organisms/100 l	Per-cent
PROTOZOA	12,983	25	197	0	0	0	0	0	0	0	2	0	0	0
ROTIFERA	22,247	42	45,005	83	38,546	33	53,269	67	50,083	58	35,273	45	94,760	74
ARTHROPODA	17,118	33	9,023	17	76,527	66	26,426	33	36,089	42	43,209	55	32,760	26
Crustacean (Larvae)	6,096	12	4,291	8	25,743	22	9,644	12	13,298	15	21,620	28	11,282	9
Cladocera	9,572	18	3,978	7	36,368	31	10,800	14	16,699	19	11,933	15	15,701	12
Copepoda	1,461	3	754	1	15,417	13	5,982	8	6,092	7	9,656	12	5,777	5
MISC. OTHERS	35	0	13	0	2	0	10	0	101	1	2	0	0	0
TOTALS	52,383	100	54,238	100	115,075	100	79,705	100	86,273	101	78,486	100	127,520	100

NOTES: 1. Cumulating orgniasm density (organisms/100 l) for all stations per cycle.
2. Percent of total cumulative organism density for all stations per cycle.

TABLE 12

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF ZOOPLANKTON ORGANISM CONCENTRATIONS AND NUMBER OF TAXA OBSERVED
AT EACH STATION SAMPLED DURING PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Sta. No.	Cycle 1 Feb. 19-22		Cycle 2 April 2-4		Cycle 3 June 4-6		Cycle 4 July 16-19		Cycle 5 Aug. 13-16		Cycle 6 Sept. 24-26		Cycle 7 Dec. 3-6	
	No. Org.[1]	No. Taxa[2]	No. Org.	No. Taxa	No. Org.	No. Taxa	No. Org.	No. Taxa	No. Org.	No. Taxa	No. Org.	No. Taxa	No. Org.	No. Taxa
01	27	15	8	13	185	15	23	21	32	17	63	16	65	16
02	36	16	8	10	40	16	11	22	48	20	47	17	76	16
03	29	15	6	9	54	14	23	19	32	18	30	20	84	14
04	30	16	8	12	55	15	26	18	57	22	69	18	80	15
05	21	16	71	12	49	14	16	15	30	16	26	18	129	20
06	15	16	55	12	55	12	13	16	29	15	30	16	95	18
07	43	13	112	13	31	19	36	25	30	16	28	15	179	18
08	28	13	129	14	43	16	32	25	33	17	70	16	113	11
09	62	15	23	16	71	26	73	21	69	24	38	18	101	19
10	42	18	27	14	49	23	100	21	50	25	57	18	92	16
11	44	21	15	13	76	27	119	22	116	21	29	22	85	20
12	94	17	--[3]	--[3]	160	15	14	21	15	21	20	14	90	14
13	2	14	2	16	77	19	111	25	144	21	67	19	20	18
14	--[3]	--[3]	5	17	2	16	3	21	9	16	24	17	2	17
15	0.31	14	2	12	69	20	112	21	133	20	87	18	0.83	18
16	0.76	10	0.92	9	1	15	2	20	7	20	9	18	0.77	14
17	2	10	0.10	5	0.66	9	0.29	11	0.83	6	15	11	1	18
18	16	17	67	17	80	22	77	26	23	27	52	25	33	17
19	33	18	5	13	54	27	21	28	22	19	33	15	42	21

NOTES: 1. Number of organisms per liter.
2. See Appendix I.
3. Not sampled due to equipment problems.

TABLE 13
LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF ADENOSINE TRIPHOSPHATE (ATP) CONCENTRATIONS (ng/l) FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station	Cycle 1 Feb. 19-22	Cycle 2 April 2-4	Cycle 3 June 4-6	Cycle 4 July 16-19	Cycle 5 Aug. 13-16	Cycle 6 Sept. 24-26	Cycle 7 Dec. 3-6
01	75*	95	171	124	30	100	***
02	80*	82	90	85	50	***	***
03	100*	97	73	135	36	88	***
04	82*	75	105	87	77	168	***
05	88*	74	81	<104	76	111	124
06	60*	60	47	151	44	37	162
07	47	53	33	121	107	174	156
08	76	140	70	< 58	117	61	117
09	53	89	105	69	104	***	200
10	144	115	78	41	50	***	99
11	62	152	96	66	62	***	***
12	86*	---**	39	36	27	374	40
13	<32	83	137	105	113	***	56
14	<21*	34	83	43	33	***	***
15	<33	47	103	143	414	***	***
16	<45	20	<27	30	37	< 32	***
17	<46	<23	<25	< 54	30	< 26	***
18	61	118	92	142	122	105	***
19	73	105	725	76	61	***	***

*Arrived back at WAR lab unfrozen.
**Not sampled due to boat problems.
***Sample lost during storage.

The ATP results are shown in Table 13. During the last three months of 1979, the liquid scintillation spectrometer was nonoperational and the September and December samples were stored frozen until it was repaired. During this storage period, approximately half of the samples for these cycles were accidently discarded resulting in incomplete data in Table 12.

Comparison of phytoplankton densities (Table 10) to ATP concentrations (Table 13) at each station shows that the numbers correspond very poorly. This is because of the great difference in cell size of the organisms. A diatom such as Navicula cryptocephala may be 40 μ long and 18 μ wide in contrast to a blue-green alga such as Microcyctis incerta which has spherical 1 μ diameter cells making up each colonial unit. Therefore, one Navicula cell would contain a much greater amount of ATP than a Microcystis cell.

Since the test includes ATP from phytoplankton, zooplankton, and bacteria it is reasonable not to expect a good correlation with any one of these separately or with total chlorophyll. Taken all together however, the trend in ATP concentration tends to follow the trends for phytoplankton, zooplankton and chlorophyll. Generally during both Phase I and Phase II, the highest ATP concentrations were found in the reservoir and the Chattahoochee and Apalachicola Rivers. Moderate values were found at station 14 and the lowest values were in the Flint River and at station 12.

Macroinvertebrates

The macroinvertebrate sampling results are summarized in Appendix J. The Chattahoochee River (stations 01 through 07) supports sparse populations of a few species of benthos adapted for a shifting sand environment. These were dominated by Corbicula and turbellarians, with chironomids and oligochaetes being consistently present although in low numbers. The oligochaetes were primarily tubificids and a new species of Enchytraeidae, Barbidrilus paucisetus (Loden and Locy, In press). The Flint River stations (16 and 17) were also characterized by shifting sands, however, the species associations were different. These were dominated by Corbicula, with oligochaetes, chironomids and turbellarians as sub-dominants. The oligochaetes were primarily tubificids and naidids. Benthic macroinvertebrate populations in the Flint River did not exhibit the depressed characteristics recorded for zooplankton and phytoplankton.

The open-water, "reservoir" stations (08, 09, 10, 11, 13, and 15) have substrates composed mostly of silt, clay, and detritus. Here the dominant benthic organisms were Hexagenia, tubificids, and chironomids. Corbicula and Chaoborus were also common.

Apalachicola River stations 18 and 19 were located within a gravel bed, a substrate much more conducive to benthic productivity than the sands and silts of the other stations. Wet weight biomass values here (Table 14) were consistently 2-3 orders of magnitude higher than at all other stations. This area was dominated by Corbicula and

TABLE 14

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF BENTHIC MACROINVERTEBRATE WET WEIGHT
BIOMASS VALUES FOR PHASE II,
FEBRUARY 1979 THROUGH NOVEMBER 1979

	Wet Weight Biomass (in grams)				
Station	Cycle 1 Feb. 18-21	Cycle 2 Apr. 2-5	Cycle 3 June 4-7	Cycle 5 Aug. 13-16	Cycle 7 Dec. 3-6
01	0.0422	0.247	0.095	0.152	2.74
02	0.0672	0.326	0.047	0.038	0.150
03	0.0548	0.093	0.084	0.155	0.030
04	0.0574	0.066	0.396	3.63	0.017
05	0.0706	2.12	0.090	0.823	0.056
06	0.0430	3.34	3.46	0.404	0.118
07	4.28	0.142	10.9	0.317	0.472
08	0.610	0.178	4.18	5.30	0.730
09	0.433	0.638	5.79	21.0	4.39
10	0.199	0.104	4.44	8.11	5.41
11	0.199	0.309	1.24	0.167	3.20
12	12.4	---	34.8	11.7	36.7
13	0.162	0.891	119	8.74	4.81
14	1.06	1.22	0.452	1.34	0.572
15	0.300	0.283	24.1	8.80	3.73
16	3.71	11.9	25.8	6.83	5.48
17	0.963	0.040	5.13	0.118	0.226
18	244	963	183	253	595
19	380	221	230	597	501

Potamyia flava. Chironomids, oligochaetes, and turbellarians are also very abundant.

Station 12 was located in a wide, shallow, relatively stagnant area, with a silty sediment high in detribus and dense, submerged aquatic macrophytes. Biomass here was consistently one order of magnitude higher than at the other stations in the reservoir. The dominant benthos were Corbicula, oligochaetes, and chironomids. Hexagenia was present but uncommon. It is likely that macroinvertebrates were much denser here than the benthic data indicate, as the abundant aquatic macrophytes could easily support more macroinvertebrates than the sediments.

Station 14 is similar to the reservoir stations in that it has silty sediments high in detritus and the benthos was dominated by Hexagenia, tubificids, and chironomids, with Corbicula and Chaoborus being common. The number of taxa was much higher, however, possibly due to the very dense submerged macrophytes.

Evenness and Shannon-Weaver diversity values (base 2) were computed for the benthos and are shown in Tables 15 and 16. The data from the three samples collected at each station were combined and the values computed from that. The values ranged from 0.253 to 3.517. Comparisons between stations show that the diversities for the Chattahoochee River stations were relatively low for stations 01 through 07 and ranged from 0.253 to 2.825 with an overall mean of 1.42. The highest diversity was found at station 14 (Spring Creek) and ranged from 2.071 to 3.469 with an overall mean of 2.707. The remaining stations had moderate diversities. Evenness values paralleled diversity; where diversity was relatively high, evenness was relatively high, and where diversity was low, evenness was low. "Biomass" estimates also paralleled diversity values.

Of the total 48 Hester-Dendy artificial substrate samplers placed during Phase II, 41 were recovered (see Appendix J). Similar to Phase I, all but a few supported macroinvertebrate densities of 5,000 or less per square meter. This occurred generally in the Chattahoochee River, the open reservoir, Fish Pond Drain, and Spring Creek, but also occurred in the Apalachicola River during cycles 1 and 2 in late winter and early spring. The remaining samplers retrieved from the Apalachicola River held the greatest macroinvertebrate densities for Phase II Hester-Dendy units. This data is summarized in Table 17. Numbers of taxa tended to be relatively higher during cycle 2. Overall, the greatest numbers of taxa occurred in the Chattahoochee River. Otherwise, the numbers of taxa were remarkably constant, generally being 8 to 10 at all areas for all cycles except cycle 6 in Fish Pond Drain, where a single predaceous dragonfly nymph (Libellula sp.) was found on the sampler.

TABLE 15

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF BENTHIC MACROINVERTEBRATE SHANNON-WEAVER SPECIES
DIVERSITY (BASE 2) FOR PHASE II
(FEBRUARY 1979 THROUGH SEPTEMBER 1979)

Station	Cycle 1 (Feb. 19-22) Shannon-Weaver Diversity	Cycle 2 (Apr. 2-4) Shannon-Weaver Diversity	Cycle 3 (June 4-6) Shannon-Weaver Diversity	Cycle 5 (Aug. 13-16) Shannon-Weaver Diversity	Cycle 7 (Dec. 3-6) Shannon-Weaver Diversity	Means For All Cycles Shannon-Weaver Diversity
01	0.735	0.388	1.976	2.288	1.124	1.302
02	0.330	0.427	2.087	2.247	0.647	1.148
03	1.502	1.232	1.834	1.387	1.065	1.512
04	0.420	1.250	1.438	1.979	1.467	1.311
05	1.118	1.205	1.618	1.043	0.953	1.187
06	0.253	0.884	1.542	2.016	2.470	1.433
07	2.825	2.374	1.965	1.624	2.100	2.181
08	2.545	1.168	1.800	2.449	2.425	2.077
09	2.538	2.507	1.719	2.190	2.376	2.266
10	2.473	1.642	2.059	2.712	2.263	2.230
11	2.686	1.689	1.238	1.990	2.022	1.925
12	3.517	--	1.949	1.473	2.014	2.238
13	1.971	2.627	1.961	1.437	1.654	1.930
14	3.006	3.469	2.071	2.646	2.345	2.707
15	2.462	2.060	2.623	2.538	1.637	2.264
16	2.979	2.453	2.465	1.560	2.132	2.318
17	2.690	1.888	2.906	0.869	2.247	2.120
18	0.584	1.476	2.023	1.771	1.115	1.394
19	0.577	0.572	1.822	1.478	1.689	1.228

TABLE 16

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF BENTHIC MACROINVERTEBRATE EVENNESS FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station	Cycle 1 (Feb. 19-22) Evenness	Cycle 2 (Apr. 2-4) Evenness	Cycle 3 (June 4-6) Evenness	Cycle 5 (Aug. 13-16) Evenness	Cycle 7 (Dec. 3-6) Evenness
01	0.316	0.129	0.659	0.815	0.562
02	0.165	0.270	0.807	0.801	0.647
03	0.535	0.439	0.710	0.537	0.672
04	0.265	0.484	0.416	0.853	0.567
05	0.482	0.519	0.510	0.348	0.953
06	0.098	0.342	0.486	0.672	0.649
07	0.723	0.581	0.548	0.439	0.632
08	0.636	0.416	0.542	0.737	0.730
09	0.734	0.659	0.612	0.943	0.715
10	0.780	0.635	0.686	0.904	0.875
11	0.809	0.602	0.619	0.663	0.585
12	0.767	--*	0.694	0.634	0.544
13	0.622	0.791	0.654	0.453	0.478
14	0.721	0.738	0.738	0.738	0.562
15	0.712	0.541	0.874	0.734	0.516
16	0.601	0.588	0.524	0.421	0.560
17	0.750	0.673	0.684	0.336	0.627
18	0.208	0.388	0.531	0.479	0.431
19	0.182	0.165	0.492	0.411	0.508

*Not sampled due to boat failure.

TABLE 17

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARIZED HESTER-DENDY MACROINVERTEBRATE DATA,
PHASE II CATEGORIZED BY LOCATION

	Chattahoochee River (Stations 1-7)			Flint River (Stations 15-16)			Apalachicola River (Stations 18-19)		
	Cycle 2	Cycle 4	Cycle 6	Cycle 2	Cycle 4	Cycle 6	Cycle 2	Cycle 4	Cycle 6
Turbellaria	0	16	16	0	8	-*	0	0	2,000
Naididae Tubificidae	365	921	175	127	0	-	40	63	0
Corbicula	8	0	0	0	0	-	0	0	0
Crustacea	0	0	0	16	468	-	0	0	16
Chironomidae	10,276	2,143	26,034	11,503	32	-	3,670	8,761	793
Ephemeroptera	24	667	128	214	318	-	0	127	587
Trichoptera	159	4,112	1,179	183	16	-	111	28,824	15,397
Misc. Insecta	88	88	8	88	16	-	88	634	32
Total Number of Organisms	10,920	7,947	27,540	12,131	858	-	3,909	38,409	18,825
Number of Organisms per sq. meter	1,560	1,324	3,934	6,066	858	-	1,954	19,204	9,412
Total Number of Taxa	29	25	24	34	10	-	20	10	8

*A (-) indicates that samplers were not recovered.

TABLE 17 (continued)

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARIZED HESTER-DENDY MACROINVERTEBRATE DATA,
PHASE II CATEGORIZED BY LOCATION

	Open Reservoir (Stations 9,11,13)			Fish Pond Drain (Station 12)			Spring Creek (Station 14)		
	Cycle 2	Cycle 4	Cycle 6	Cycle 2	Cycle 4	Cycle 6	Cycle 2	Cycle 4	Cycle 6
Turbellaria	0	0	0	-	0	0	8	-	0
Oligochaeta	1,397	96	0	-	16	0	198	-	0
Corbicula	0	0	0	-	0	0	0	-	0
Crustacea	0	8	16	-	119	0	198	-	127
Chironomidae	5,366	532	3,627	-	135	0	128	-	316
Ephemeroptera	24	0	0	-	8	0	254	-	0
Trichoptera	72	945	802	-	8	0	24	-	349
Misc. Insecta	24	8	16	-	0	8	16	-	0
Total Number of Organisms	6,883	1,589	4,461	-	286	8	826	-	792
Number of Organisms per sq. meter	3,442	530	1,487	-	286	8	826	-	792
Total Number of Taxa	22	10	10	-	9	1	17	-	8

NOTE:

Cycle	Dates	
2	Placed: 2/19-22/79	Retrieved: 4/2-4/79
4	Placed: 6/4-6/79	Retrieved: 7/16-19/79
6	Placed: 8/13-16/79	Retrieved: 9/24-26/79

Species diversity values were generally moderate to low (Table 18). The Chattahoochee River samplers supported a wide range of diversities, including most of the highest values and some of the lowest. This is probably as much an artifact of the low organism densities as it is an indication of relative environmental health. The remainder of the samplers supported a narrower range of diversities.

Chattahoochee River stations were dominated by midge (Chironomidae) larvae, primarily Glyptotendipes sp. and other filter-feeding phytoplanktivores. Mayfly (Ephemeroptera) larvae, filter-feeding caddisfly (Tricoptera) larvae, and naidid (Naididae) oligochaetes were also present but in moderate to low numbers. Flint River samplers were heavily dominated (95 percent of total number of organisms) by midge larvae, primarily Cricotopus spp. and Thienemanniella xena, which are aufwuchs feeders. Amphipods, mayfly larvae, and caddisfly larvae were also present in significant numbers.

The Apalachicola River samplers were dominated (94 percent of total number of organisms) by midge larvae (primarily Cricotopus spp.) during cycle 2 and by caddisfly larvae (77 percent) during cycles 4 and 6. The caddisfly larvae were composed almost entirely by the phytoplanktivore Potamyia flava. Triclad turbellarians (Dugesia?) formed almost 11 percent of the organisms on the cycle 6 samplers.

The open reservoir stations (9, 11, 13) sampled were dominated by phytoplanktivorous midges (Glyptotendipes sp., Dicrotendipes spp.) and a phytoplanktivorous caddisfly larva (Phylocentropus sp.). Naidid oligochaetes, which feed on aufwuchs, were common during cycle 2.

Macroinvertebrate densities were generally lowest in Fish Pond Drain (station 12) and Spring Creek (station 14), probably because of the paucity of algal food (phytoplankton and aufwuchs). Station 12 was dominated during cycle 4 by Hyalella azteca, an amphipod, and by the midge Endochironomus sp. Station 14 was dominated during cycle 2 by Hyalella azetca, naidid oligochaetes, and the mayfly Stenonema sp.; and during cycle 6 by Dicrotendipes spp., Glyptotendipes sp., and Phylocentropus sp.

Macrophytes

Aquatic macrophytes are probably the most conspicuous feature of Lake Seminole. Reservoir personnel have identified over 700 taxa of macrophytes from aquatic situations. Approximately 73 taxa were recorded in this survey to be common to abundant (Appendix M). They cover an estimated 40.1 percent of the area of the reservoir (Table 19). They have become a severe nuisance in many locations such as access channels and boat ramps. The distribution of aquatic macrophytes in

TABLE 18

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF HESTER-DENDY MACROINVERTEBRATE SHANNON-WEAVER SPECIES DIVERSITY (BASE 2) AND EVENNESS FOR PHASE II
(FEBRUARY, 1979 THROUGH DECEMBER, 1979)

Station	Cycle 2 (Apr. 2-4, 1979)		Cycle 4 (July 16-19, 1979)		Cycle 6 (Sept. 24-26, 1979)		Means for All Cycles for
	Shannon-Weaver Diversity	Evenness	Shannon-Weaver Diversity	Evenness	Shannon-Weaver Diversity	Evenness	Shannon-Weaver Diversity
01	2.377	0.608	1.311	0.414	0.620	0.179	1.44
02	2.545	0.599	---	---	0.753	0.198	1.65
03	1.053	0.453	3.045	0.779	1.589	0.389	1.90
04	1.360	0.357	2.285	0.688	1.433	0.387	1.69
05	1.432	0.400	2.879	0.756	0.825	0.260	1.71
06	1.803	0.451	2.844	0.822	0.929	0.359	1.86
07	2.303	0.622	1.604	0.620	1.749	0.753	1.88
09	1.792	0.518	1.736	0.748	0.767	0.384	1.43
11	---*	---	1.443	0.621	1.550	0.775	1.50
12	---	---	2.156	0.680	0.000	N/A**	1.08
13	1.730	0.400	1.186	0.511	1.316	0.567	1.41
14	2.906	0.711	---	---	2.210	0.737	2.56
15	1.633	0.372	---	---	---	---	1.63
16	2.386	0.502	1.950	0.587	---	---	2.17
18	1.421	0.364	0.997	0.332	0.590	0.210	1.00
19	0.903	0.231	1.285	0.497	1.192	0.461	1.13

*(---) indicates sampler was not retrieved

**N/A indicates an undefined term $(E = \frac{D}{\ln T} = \frac{0.00}{\ln T})$

TABLE 19

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
COVERAGE OF AQUATIC MACROPHYTES ON LAKE SEMINOLE
CATEGORIZED BY SPECIES ASSOCIATION

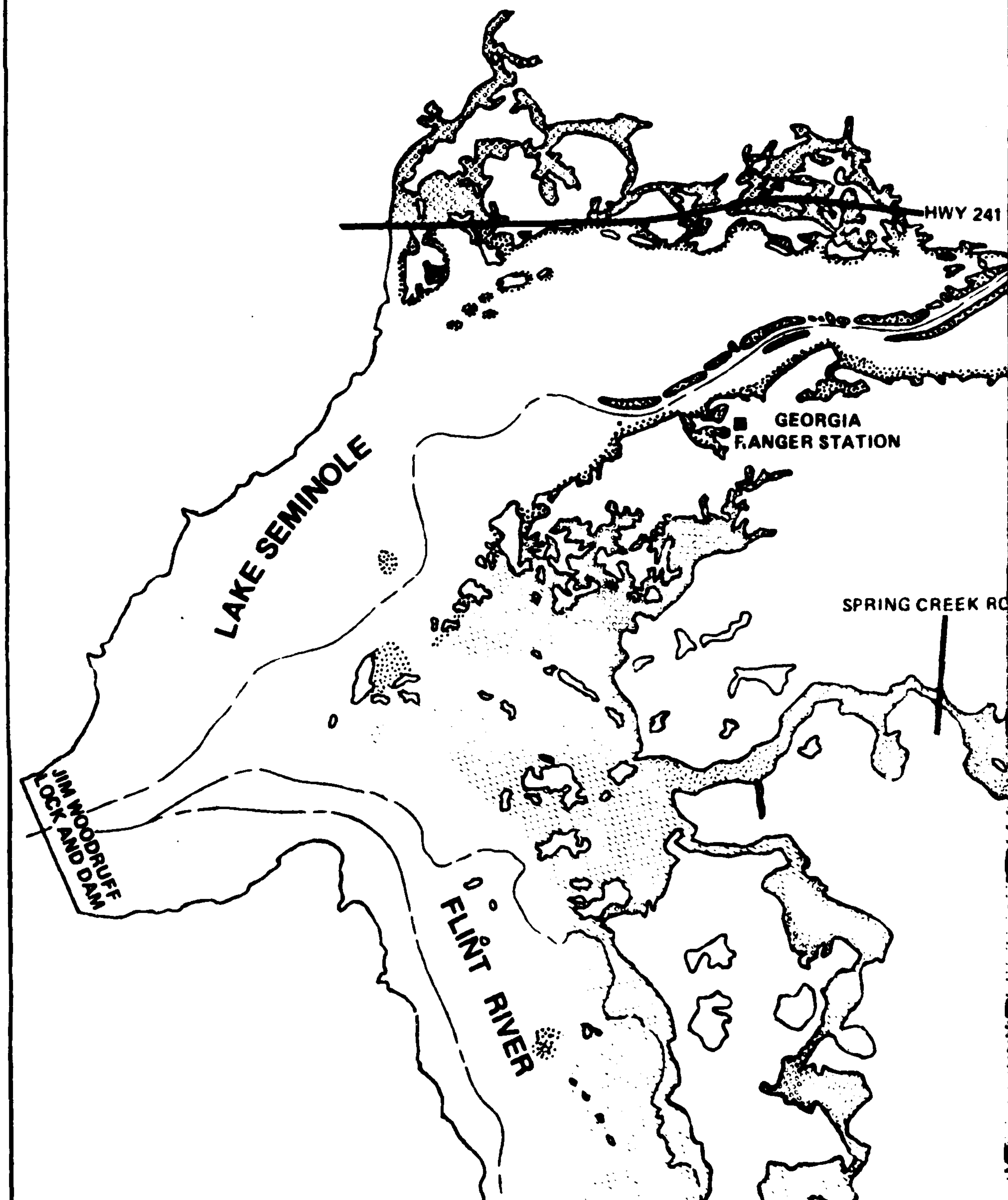
Species Association	Acreage	Percent of Total Vegetated Area	Percent of Total Reservoir Surface Area*
Mixed Emergent and Submerged Species	2,805	18.7	7.5
Water Milfoil	8,892	59.3	23.7
Hydrilla	1,561	10.4	4.2
Giant Cutgrass	1,746	11.6	4.7
TOTAL	15,004	100.0	40.1

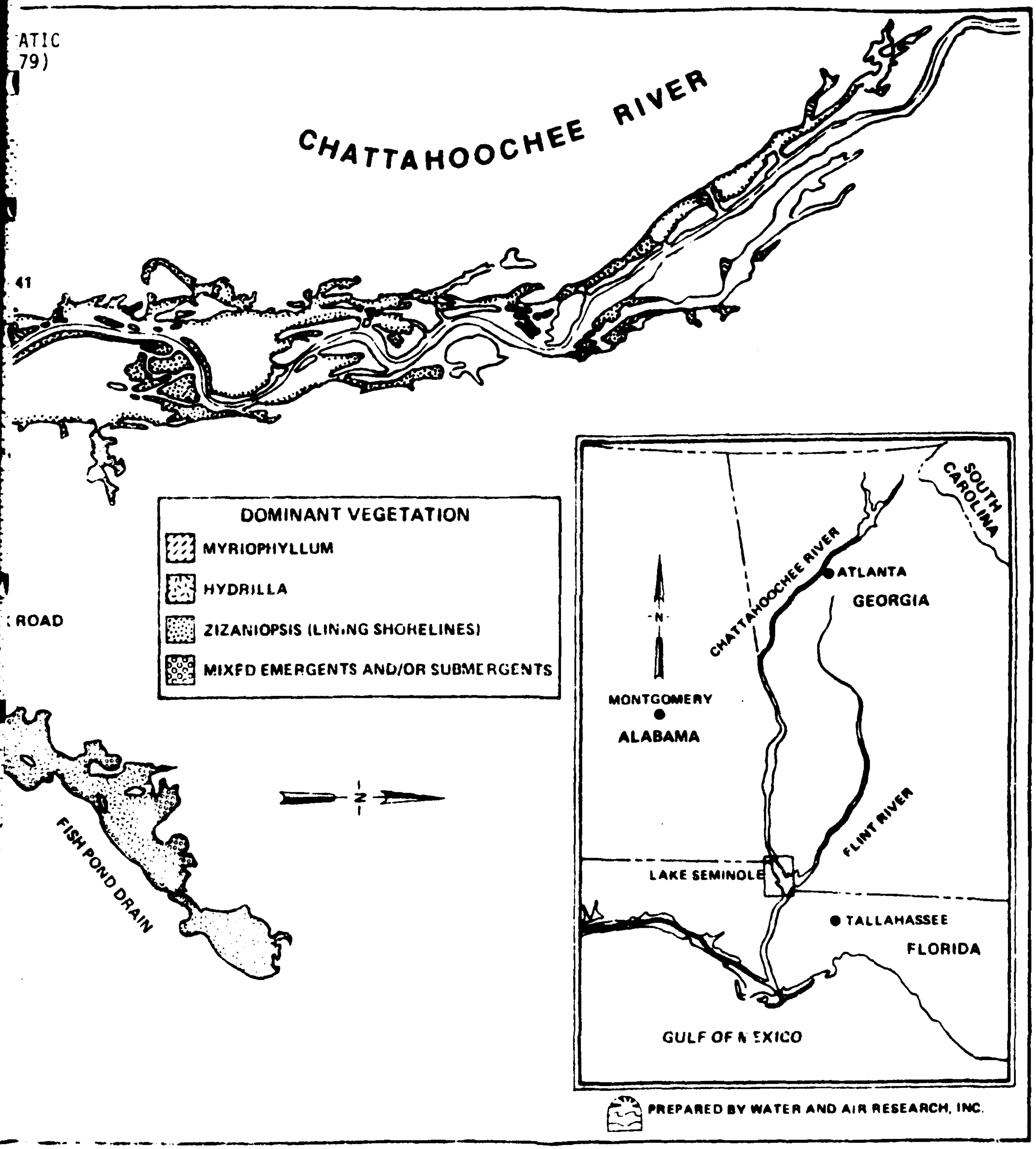
*Surface area of the total reservoir assumed to be 37,500 acres (USACOE.n.d.).

Lake Seminole is shown in Figure 4 and categorized by species association in Table 19.

Submersed vegetation occurs almost everywhere the water is transparent enough to allow sunlight to penetrate to the bottom. Emergent vegetation occurs almost everywhere the water is shallow enough for them to become established. Where the water is too turbid or too deep, floating plants have the potential to become very dense. Intensive spraying of herbicides during 1978 and 1979 kept the floating plants to a minimum. However, in the Flint River where hyacinths were reduced by herbicide spraying, broken patches of floating algal mats were present over large areas. Spraying has also been conducted over the last few years in a number of small access channels and canals. In every instance, though, aquatic macrophytes were quickly reestablished, and by the middle of the following growing season the macrophytes were once again of nuisance proportions. For this reason, and due to the very high costs, spraying has been conducted generally only on selected areas of high cultural use such as boat ramps and access channels. The morphometry of the reservoir and the relatively high nutrient inputs virtually assure that aquatic macrophytes will be a major management problem for the remainder of the reservoir's life.

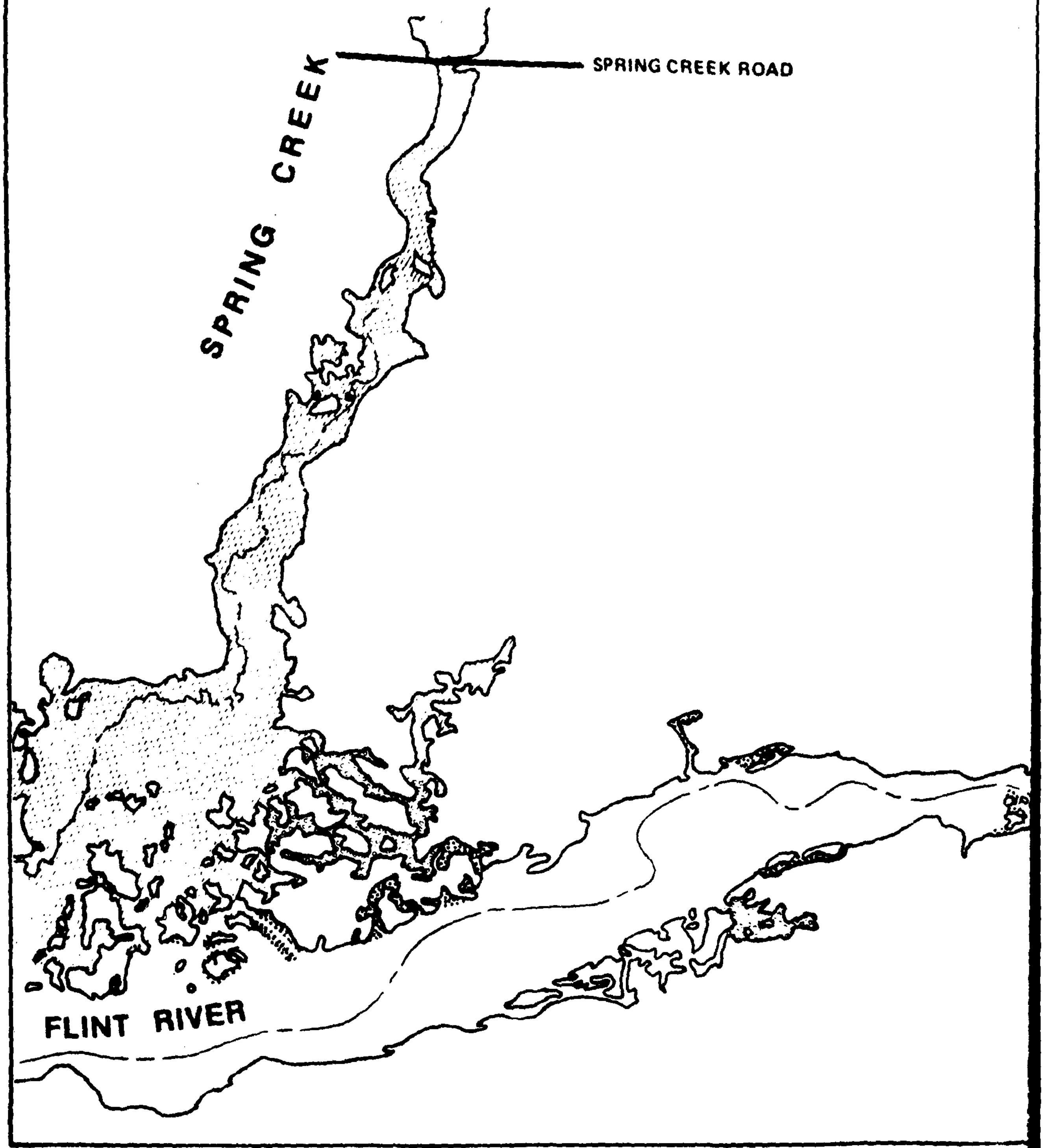
FIGURE 4. LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY DISTRIBUTION OF AQUAT
MACROPHYTES DURING PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 1979

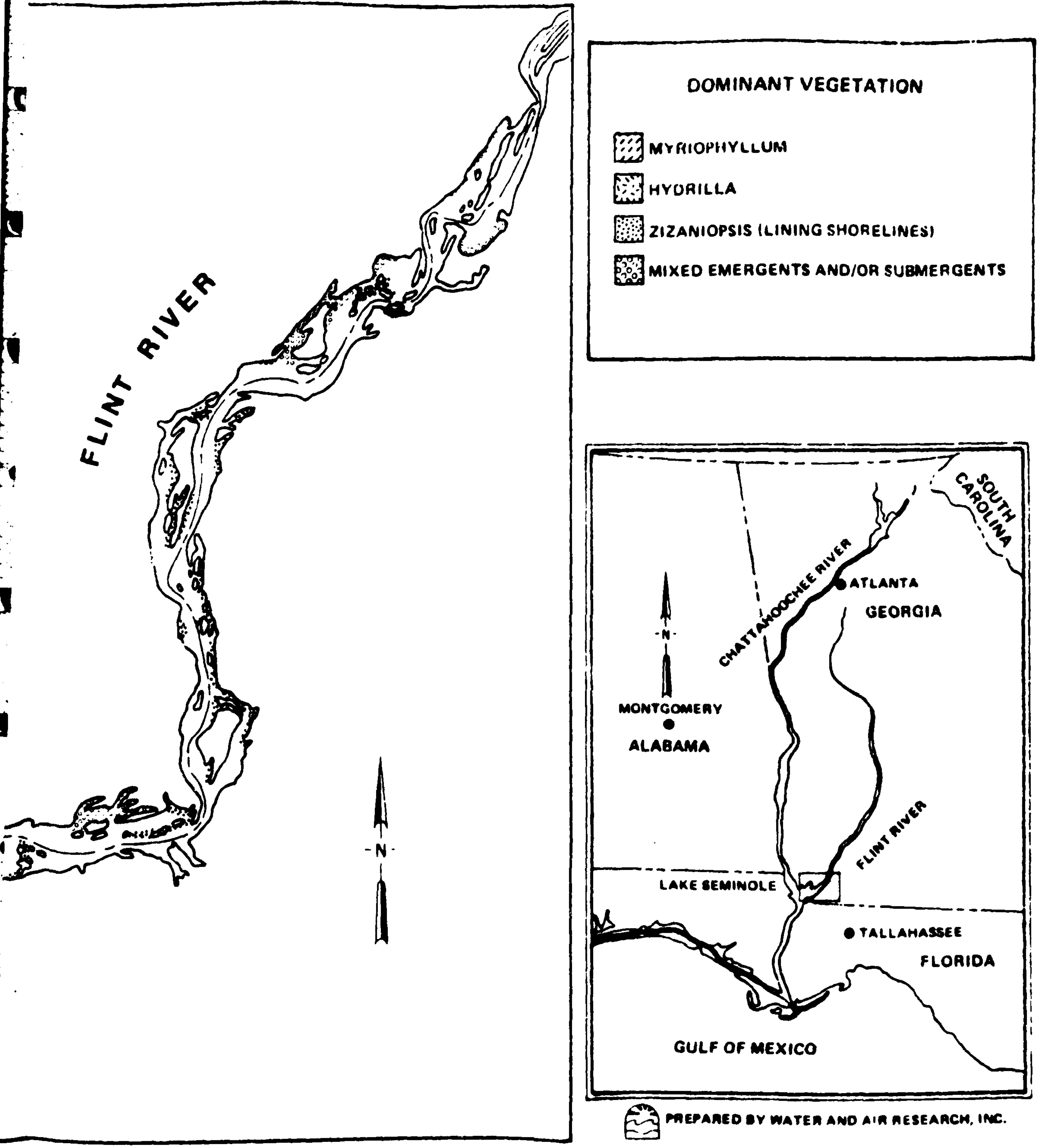




ATIC
79)
41
ROAD
CHATTAHOOCHEE RIVER
DOMINANT VEGETATION
MYRIOPHYLLUM
HYDRILLA
ZIZANIOPSIS (LINING SHORELINES)
MIXED EMERGENTS AND/OR SUBMERGENTS
N
FISH POND DRAIN
SOUTH CAROLINA
CHATTAHOOCHEE RIVER
ATLANTA
GEORGIA
N
MONTGOMERY
ALABAMA
FLINT RIVER
LAKE SEMINOLE
TALLAHASSEE
FLORIDA
GULF OF MEXICO
PREPARED BY WATER AND AIR RESEARCH, INC.

FIGURE 4. LAKE SEMINOLE WATER QUALITY ·ANAGEMENT STUDY DISTRIBUTION OF AQUATIC MACROPHYTES DURING PHASE II (FEBRUARY, 1979 THROUGH DECEMBER, 19?9) (continued)





PREPARED BY WATER AND AIR RESEARCH, INC.

SUMMARY

The purpose of Phase I and II of the Lake Seminole Water Quality Management Study was the establishment of a comprehensive water quality, sediment, and biological data base at various sites within the impoundment, in the backwater stretches of the major tributaries, and immediately downstream of the outfall on the Apalachicola River. This data base is to be utilized for the combined purposes of future reference, guidance in the improvement of reservoir operations, facilitation of coordination with state agencies in the implementation of watershed pollution control measures, and identification of significant water quality problems.

Meteorological, hydrological, water quality, sediment, and biological data were obtained at a total of 19 main sampling stations in Lake Seminole, the Chattahoochee River, the Flint River, Spring Creek, Fish Pond Drain, and the Apalachicola River during 6 sampling cycles in Phase I (April through November, 1978) and 7 sampling cycles during Phase II (February through December, 1979). Limited sampling and analyses were also performed at 5 special sampling sites at various times during the course of this study. Biological sampling included bacteria, phytoplankton, zooplankton, macroinvertebrates, and aquatic plants.

Average monthly flows through the impoundment during Phase II ranged from 349 m^3/sec. during August to 1518 m^3/sec. during April. These values compare to a low of 221 m^3/sec. during November and a high of 1005 m^3/sec. during May of Phase I. During the study period, the Chattahoochee River accounted for 50-80 percent of the flow into the impoundment. As a result of operational procedures at the Walter F. George Lock and Dam on the Chattahoochee River upstream of Lake Seminole, flows through the Chattahoochee River impoundment arm exhibited considerable short term variation.

In general, each of the major impoundment arms of Lake Seminole tended to be well-mixed both laterally and vertically. Little lateral variation and essentially no vertical stratification was observed in temperature, dissolved oxygen, pH, or oxidation-reduction potentials during the April, 1978; August, 1978; February, 1979; or August, 1979 sampling cycles during which extensive in situ sampling was performed. Although surface warming at most lake stations was evident during the summer (June, July, and August), the shallowness of the impoundment prevented the development of a well-defined thermocline.

Average turbidity levels in the Chattahoochee River were approximately two to three times those in the Flint River with suspended solids, Secchi disk, and percent light transmittance exhibiting the same general areal pattern over the course of the study. Specific conductance, total dissolved solids, and alkalinity were lowest at the Chattahoochee River

sites and generally higher on the Flint River during both years of the study. The Chattahoochee River also had lower mean levels of total calcium and total hardness than the rest of the stations. Concentrations of most of the other inorganic water quality parameters, except nutrients, showed no significant areal or chronological patterns. Concentrations of all sampled metals, except iron, were generally low with no obvious areal patterns. Concentrations of total iron at most stations during the spring and early summer months exceeded the EPA criterion of 1.0 mg/l for freshwater aquatic life. In all cases, total iron was composed primarily of insoluble forms.

Total inorganic nitrogen ranged from 0.30 to 0.78 mg/l at Flint River stations to 0.08 to 0.53 mg/l at Chattahoochee River stations. Levels were generally highest in the spring, decreased over the summer, and rose again in the fall. Total phosphorus values were generally much lower during Phase II than during Phase I. During Phase II, all values were between 0.01 and 0.07 mg/l. Dissolved orthophosphate values comprised usually less than 20% of the total phosphate except in the Flint River where it comprised the majority of it.

In general, based on nutrient content, the waters of Lake Seminole tended to be moderate to highly productive with respect to the production of algal biomass. On the basis of potential algal production alone, the system would be classed as eutrophic. During the spring of Phase I, the system was phosphorus limited, with many areas becoming nitrogen limited as the summer progressed. During Phase II however, this trend was not observed ahd phosphorus remained the limiting nutrient throughout the year. Trace metals did not appear to limit algal growth and no toxicity effects were observed at station 16 near Bainbridge.

Phytoplankton populations were characteristic of a system of this type with no observed algal blooms of one or two species. The lack of a spring and/or fall phytoplankton bloom may have been the result of the high turbidity in the system although a slight peak was observed during April of Phase II. Lowest densities were found during the winter and early spring months after which they increased to an average of approximatly 14,000 cells/ml in August. As the temperatures increased during the spring and summer, there was a corresponding shift in the plankton associations from diatoms to blue-green algae. Phytoplankton densities were generally higher in the Chattahoochee River than in the reservoir during early spring and late fall while the reverse was true during the summer sampling periods.

During both Phase I and Phase II, phytoplankton densities were extremely low at stations 16 and 17 on the Flint River during all sampling cycles. Further study upstream of station 17 to mile 37.0 on the Flint River shows comparably low densities. It is still presently unknown if this is a toxic response or if these low densities are simply normal for the Flint River.

During both phases of this study, zooplankton assemblages exhibited little variation in the number of taxa found at each station during the year. However, zooplankton densities were greatest during September of Phase I (overall mean of 96 organisms/l) and December of Phase II (overall mean of 67 organisms/l). The Rotifera were the most abundant organisms at each station during most of the sampling cycles.

At stations 16 and 17 on the Flint River there was a marked reduction in zooplankton densities similar to that shown for phytoplankton. Generally, station 17 had fewer organisms than station 16. Further study upstream of station 17 to mile 37.0 resulted in densities comparable to those at stations 16 and 17. The reason for these low densities is unknown. Zooplankton densities at station 14 on Spring Creek were also lower than throughout the rest of the system. Reservoir station densities were highest during the summer months when phytoplankton were also abundant.

The bacteriological quality in Lake Seminole during Phases I and II ranged from good in the upper Chattahoochee River stations and at the lake stations where fecal coliform levels were generally below 100/100 ml, to poor at station 17 in the Flint River in the vicinity of Bainbridge where fecal coliform concentrations in excess of 2,500/100 ml were observed during June of Phase I and above 1,400/100 ml during February of Phase II. The fecal coliform to fecal streptococci ratios tend to indicate that human sources of contamination predominated in the Flint River and agricultural sources predominated in the Chattahoochee and Apalachicola Rivers.

ATP concentrations tended to follow the same general trends as phytoplankton, zooplankton, and chlorophyll. However, due in part to differences in total biomass, only a poor correlation existed between individual assemblages. The highest concentration (725 μg/l) was found during June of 1979 at station 19. The reason for the high value at this station is unknown. During both Phase I and Phase II the highest concentrations were generally found in the reservoir and the Chattahoochee and Apalachicola Rivers. Moderate values were found at station 14 and the lowest values were in the Flint River and at station 12.

Bottom sediments ranged from relatively clean sands in the Chattahoochee, Flint, and Apalachicola Rivers to sand and sandy loams in the impoundment itself. The organic and nutrient contents tended to be related to the percent fines. Heavy metals concentrations were generally low. The concentration of most of the pesticides analyzed were below detectable limits, although levels of PCB Aroclor 1254 and p,p-DDE were detected at a number of sites with the highest PCB level (64 μg/kg) at station 19 and the highest DDE level (5.4 μg/kg) found at station 14 during Phase II. Although no detectable levels of 2-4D were found during Phase II, levels as high as 569 μg/kg (station 03) were found during Phase I.

Benthic macroinvertebrate populations tended to be closely associated with the nature of the supporting substrate. Chattahoochee and Flint River stations exhibited sparse populations adapted to a shifting sand environment, although the species associations were dissimilar. Lake stations supported populations adapted to a substrate composed of finer sands, silts, and clays. The sampling sites in the Apalachicola River were characterized by a coarser, more productive substrate. Benthic diversities ranged from relatively low in the Chattahoochee River to moderate in the Flint and Apalachicola Rivers with the diversities in the reservoir varying seasonally from moderate to low, with lowest diversities occurring towards late summer. Evenness and biomass tended to closely parallel diversity. Corbicula were collected during August of both Phase I and II. However, they were found in sufficient quantity for complete analyses at only two stations during Phase I and at one station during Phase II. In all samples, the levels of mercury and chlordane (the only analyzed chemicals for which FDA Action Levels have been established) were below the FDA Action Levels.

Aquatic macrophytes constituted the most conspicuous feature of Lake Seminole. They were a severe nuisance in a number of locations such as access channels and boat ramps. Emergent and/or floating macrophytes covered over 40 percent of the total reservoir surface area and nearly 100 percent of the surface area with a depth less than 2 meters. Approximately 73 taxa were identified during this study as being either common or abundant.

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 2/8

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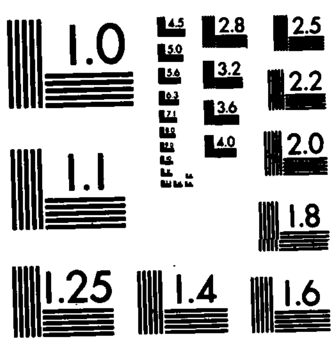

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

RECOMMENDATIONS FOR FUTURE STUDIES

The following are areas which deserve consideration for future studies.

1. Macrophytes

Aquatic macrophytes are well established on over 40 percent of Lake Seminole, and cover almost 100 percent of the portion that is less than two meters deep. Since the macrophytes are not limited by nutrients or grazing, it is likely that they will continue to increase in extent until blocked by riverine currents or water too turbid to transmit sunlight. Even then, expansion may continue although at a reduced rate, since siltation continues to slowly fill the reservoir. Also, aquatic vegetation increases the rate of siltation (and organic matter deposition), thus increasing the rate of macrophyte expansion. Through this process, aquatic macrophytes may eventually cover the entire lentic portion of the reservoir.

This situation is a result of several factors: (1) The reservoir is generally very shallow, and in most places the water is sufficiently transparent to allow insolation to penetrate to the bottom of the water column. (2) The availability of nutrients to macrophytes from upstream sources is essentially unlimited. (3) The number of macrophyte species is so diverse, that even if a "perfect" herbicide could be developed to completely eliminate a species from the reservoir, there are dozens of species that would be able to quickly invade and repopulate the area. This is readily borne out by the experiences of reservoir personnel (D. Vickers, pers. comm.), where choked access channels were sprayed one year for Species A, and the following year they were choked with Species B.

Past management practices have been limited to small areas of high user demand due to the high economic costs. In 1978, for example, about 1,080 acres were sprayed or chopped for an estimated total cost of \$76,095 (see Table 20). In 1979 and 1980, a total of 1,430 acres were treated for a cost of \$213,190, an average cost of \$149 per acre. Reservoir personnel had requested more than twice that amount in order to spray 5,050 acres (\$100 per acre). Reservoir personnel are now asking for \$300,000 to treat 2,000 acres (\$150 per acre) in 1981. By way of reference, the total reservoir surface area is estimated to be 37,500. Should the whole of the infested portion of Lake Seminole be treated at an average cost of \$150 per acre, the total cost would be approximately \$2,250,000.

Clearly, these expensive measures can provide only temporary relief from the symptoms of greater problems. It is quite possible that a more lasting and less expensive solution(s) exists. Water

TABLE 20

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
SUMMARY OF COSTS INCURRED AND ACREAGES TREATED FOR AQUATIC MACROPHYTE CONTROL, 1978 TO 1981

	Treated[1]		Treatment Proposed	
Year	Acreage	$	Acreage	$
1978	1,080	76,095	NA[4]	NA
1979	50	206,070[1]	2,000	195,700
1980	1,380	7,120[3]	3,050	309,525
1981	--	--	2,000	300,000

[1]Treatment includes herbicide sprays, herbicide pellets, and mechanical chopping.

[2]These funds were spent on herbicides at the end of 1979; the acreage was subsequently treated in 1980.

[3]Airplane rental only.

[4]Not Available.

level drawdowns, for instance, have proven very beneficial in various lakes in Florida. The Lake Seminole Reservoir is a far more complex system physically than the average lake, however. A combination of several kinds of treatments may be necessary in this shallow, nutrient-rich and most botanically diverse reservoir.

2. Intensive Study of Flint River

Analysis of the data, throughout Phase I and Phase II, identified a marked reduction in phytoplankton, zooplankton, chlorophyll, and ATP levels in the Flint River at miles 24 and 29 (stations 16 and 17, respectively) near Bainbridge, Georgia. It would appear that the river is continuously stressed from a source upstream from station 17 unless the Flint River naturally has low plankton densities. Since station 17 represents the northern extremity of the present study, the limits of these conditions were not defined. The cause of this stress is unknown, but it does not appear to be physical in nature -- no gradients were observed with temperature, dissolved oxygen, conductivity, or pH from stations 15 through 17. Further study upstream of station 17 to mile 37.0 on the Flint River during the December 1979 sampling cycle resulted in plankton densities comparable to those at station 17. Further study should be conducted to determine the cause, extent, and magnitude of this possible environmental impact, which is identified by the plankton density decreases.

PARTICIPATING STAFF

A project team of engineers, biologists, chemists, and technicians conducted the study. The overall project manager was Dr. J.H. Sullivan, Jr., with the assistance of Mr. B. Bailey, Mr. R. Blum, and Mr. J. Nichols in logistics, data analysis, and field activities. Dr. H. D. Putnam served as coordinator and advisor for the biological activities. Mr. M. Hein and Mr. B. Pruitt were responsible for the field and in-house biological efforts with the assistance of Ms. P. Dickinson and Charles Markum.

Mr. B. Bailey and Mr. M. Hein were responsible for the coordination of field water quality sampling and reporting. Analytical procedures were supervised by Ms. C. Hackett, Dr. M. Keirn, and Ms. M. Schultz with the assistance of Mr. G. Burch, Mr. S. Hall, Mr. L. Larson, Ms. M. Neves, Mr. P. Nathanson, and Mr. M. Timpe. Dr. M. Keirn and Mr. M. Hein coordinated the Algal Growth Potential test work. Mr. J. Nichols supervised and coordinated all the computerized data handling with the assistance of Mr. M. Timpe and Ms. K. Barnes. Field personnel included Mr. B. Bailey, Mr. R. Blum, Mr. S. Chamberlin, Mr. M. Hein, Mr. B. Pruitt, Mr. M. Putnam, and Mr. M. Timpe.

The final copy was produced by Ms. J. Dorsey, Ms. D. Nickelson, Ms. J. Nyland, Ms. C. Hoffenberg, and Ms. P. Paschall.

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APPENDIX A

STREAM FLOWS

LIST OF TABLES

TABLE A-1

STREAM FLOWS - MONTHLY AVERAGES (CFS)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
February	18,772	11,470	1,807	40,390
April	29,986	13,013	1,021	53,595
June	7,449	3,598	N/A	14,262
July	5,197	3,820	504	12,464
August	6,263	2,682	298	12,324
September	6,177	N/A	452	14,832
December	7,631	3,908	491	15,136

NOTE: N/A = Data not Available

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-2

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 1)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
February				
11	5,460	2,470	1,870	34,227
12	15,352	2,350	1,430	31,573
13	15,400	1,720	1,050	35,419
14	13,213	1,900	900	36,652
15	10,804	1,780	848	32,838
16	11,611	1,650	813	27,732
17	0	1,840	785	21,683
18	0	1,760	756	16,624
19	5,796	1,700	714	17,526
20	9,354	2,230	766	16,567
21	18,708	1,990	824	23,047
22	28,928	2,340	982	40,685
23	31,172	2,180	1,200	47,737
24	44,255	2,060	2,090	63,298

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-3

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 2)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
March				
25	0	7,540	1,020	24,477
26	10,621	7,970	1,070	20,604
27	11,996	8,160	998	24,545
28	12,042	8,310	835	25,793
29	5,274	8,080	738	26,823
30	19,379	7,640	698	24,670
31	0	6,940	663	19,812
April				
1	40	6,240	654	16,595
2	8,113	5,570	646	16,435
3	13,883	6,170	643	20,303
4	28,219	6,140	716	31,293
5	53,575	7,650	1,110	55,851
6	52,935	8,810	1,610	71,996

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-4

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 3)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
May				
27	244	3,580	N/A	13,725
28	6,291	3,160	N/A	12,969
29	6,038	3,790	N/A	12,247
30	6,154	4,760	N/A	11,860
31	6,224	3,990	N/A	12,179
June				
1	17,216	4,540	N/A	13,464
2	10,948	4,740	N/A	21,350
3	0	4,480	N/A	22,742
4	11,534	4,600	506 P	17,864
5	12,667	5,050	479	19,312
6	12,737	5,070	429	19,264
7	12,716	5,110	398	19,171
8	12,729	5,020	368	23,873

NOTE: N/A = Data not available
P = Daily summary is for incomplete day

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-5

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 4)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
July				
8	40	2,700	284	10,339
9	8,558	2,420	411	10,187
10	8,654	3,650	417	10,122
11	8,707	4,100	409	9,292
12	4,992	4,190	476	9,660
13	1,128	4,160	662	9,306
14	81	4,510	796	8,421
15	40	4,570	785	8,699
16	4,479	4,060	705	9,193
17	6,100	3,710	694	9,702
18	5,588	3,910	557	10,945
19	3,142	4,080	449	15,372
20	5,611	4,020	574	14,584
21	5,276	4,420	766	12,932

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-6

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 5)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
August				
5	41	3,300	368	11,998
6	6,646	2,690	337	12,076
7	8,034	3,130	349	12,074
8	7,979	3,180	358	11,867
9	8,016	3,070	304	11,683
10	7,992	2,860	269	13,262
11	82	2,720	251	14,067
12	41	2,460	232	13,975
13	8,283	2,180	236	12,280
14	8,489	2,050	268	11,855
15	8,458	2,030	245	11,923
16	8,626	1,990	219	11,926
17	8,580	2,080	208	11,934
18	122	2,050	206	11,884

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-7

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 6)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
September				
16	0	N/A	391	12,644
17	7,108	N/A	405	12,871
18	7,229	N/A	482	12,387
19	7,025	2,800 P	592	13,489
20	10,658	3,430	622	12,479
21	8,706	3,250	525	13,271
22	82	3,350	443	14,091
23	0	2,810	457	12,285
24	7,013	3,540	502	12,029
25	7,116	4,380	488	12,186
26	7,138	6,080	612	13,324
27	7,075	6,890	806	18,838
28	14,333	6,750	1,010	30,442

NOTE: N/A = Data not available
P = Daily summary is for an incomplete day

Source: [1]USGS, Water Resources Division, Doraville, GA

TABLE A-8

DAILY AVERAGE STREAM FLOWS (CFS)
(CYCLE 7)

	Chattahoochee River At George Lock & Dam	Flint River[1] at Newton, GA	Ichawaynochaway[1] Creek at Milford, GA	Jim Woodruff Lock & Dam
November				
25	0	2,480	388	16,852
26	14,592	2,690	414	17,168
27	14,654	4,730	480	17,189
28	17,896	5,830	545	17,559
29	17,788	6,010	551	21,811
30	17,962	5,020	499	26,397
December				
1	7,165	5,650	449	23,180
2	41	3,790	421	16,710
3	12,092	4,020	407	16,764
4	12,096	5,390	402	16,627
5	13,367	5,260	398	16,846
6	16,013	4,330	409	22,279
7	17,639	4,140	475	26,458
8	10,675	5,170	581	26,069
9	81	4,820	657	17,107

Source: [1]USGS, Water Resources Division, Doraville, GA

APPENDIX B

METEOROLOGICAL DATA

LIST OF TABLES

TABLE B-1

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 2/21/79	STATION 02 2/21/79	STATION 03 2/21/79	STATION 04 2/21/79	STATION 05 2/21/79	STATION 06 2/21/79	STATION 07 2/20/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	21.0	20.0	20.0	19.0	20.0	17.0	16.0
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.	100.	100.
WIND VELOCITY (MPH)	0.0	7.5	7.5	7.5	2.5	5.0	0.0
WIND DIRECTION (DEG FM TRUE N. CW)	--	240	140	120	140	220	--

PARAMETER NAME (UNITS)	STATION 08 2/20/79	STATION 09 2/20/79	STATION 10 2/20/79	STATION 11 2/20/79	STATION 12 2/22/79	STATION 13 2/19/79	STATION 14 2/22/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	16.0	13.0	13.0	13.0	22.0	11.0	2.5
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.	10.	150.
WIND VELOCITY (MPH)	5.0	5.0	5.0	0.0	0.0	7.5	7.5
WIND DIRECTION (DEG FM TRUE N. CW)	100	80	80	--	--	20	140

PARAMETER NAME (UNITS)	STATION 15 2/19/79	STATION 16 2/19/79	STATION 17 2/19/79	STATION 18 2/20/79	STATION 19 2/20/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	11.0	11.0	8.0	11.5	11.0
CLOUD COVER (PERCENT)	5.	5.	0.	100.	100.
WIND VELOCITY (MPH)	7.5	5.0	5.0	0.0	0.0
WIND DIRECTION (DEG FM TRUE N. CW)	20	60	0	--	--

TABLE B-2

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 4/ 4/79	STATION 02 4/ 4/79	STATION 03 4/ 4/79	STATION 04 4/ 4/79	STATION 05 4/ 4/79	STATION 06 4/ 4/79	STATION 07 4/ 3/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	24.0	25.0	25.0	21.0	22.0	23.0	21.0
CLOUD COVER (PERCENT)	50.	100.	50.	100.	100.	100.	100.
WIND VELOCITY (MPH)	5.0	10.0	7.5	0.0	5.0	0.0	0.0
WIND DIRECTION (DEG FM TRUE N, CW)	200	180	180	--	160	--	--

PARAMETER NAME (UNITS)	STATION 08 4/ 3/79	STATION 09 4/ 3/79	STATION 10 4/ 2/79	STATION 11 4/ 3/79	STATION 13 4/ 2/79	STATION 14 4/ 2/79	STATION 15 4/ 2/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	21.0	22.0	25.0	23.0	26.0	25.0	26.0
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.	100.	100.
WIND VELOCITY (MPH)	0.0	0.0	10.0	10.0	7.5	10.0	7.5
WIND DIRECTION (DEG FM TRUE N, CW)	--	--	340	160	180	180	200

PARAMETER NAME (UNITS)	STATION 16 4/ 2/79	STATION 17 4/ 2/79	STATION 18 4/ 3/79	STATION 19 4/ 3/79
METEOROLOGICAL DATA				
AIR TEMPERATURE (DEG C)	27.0	25.0	27.0	25.0
CLOUD COVER (PERCENT)	30.	40.	100.	100.
WIND VELOCITY (MPH)	7.5	10.0	15.0	15.0
WIND DIRECTION (DEG FM TRUE N, CW)	180	170	180	180

TABLE B-3

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 6/ 6/79	STATION 02 6/ 6/79	STATION 03 6/ 6/79	STATION 04 6/ 6/79	STATION 05 6/ 6/79	STATION 06 6/ 6/79	STATION 07 6/ 5/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	27.0	32.0	31.0	31.0	29.0	29.0	31.0
CLOUD COVER (PERCENT)	100.	70.	80.	50.	70.	100.	40.
WIND VELOCITY (MPH)	5.0	0.0	0.0	5.0	0.0	0.0	2.5
WIND DIRECTION (DEG FM TRUE N. CW)	190	--	--	180	--	--	100

PARAMETER NAME (UNITS)	STATION 08 6/ 5/79	STATION 09 6/ 5/79	STATION 10 6/ 5/79	STATION 11 6/ 5/79	STATION 12 6/ 6/79	STATION 13 6/ 4/79	STATION 14 6/ 4/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	34.0	29.0	29.0	27.0	27.0	31.0	30.0
CLOUD COVER (PERCENT)	15.	50.	30.	5.	50.	20.	5.
WIND VELOCITY (MPH)	0.0	10.0	7.5	5.0	2.5	10.0	10.0
WIND DIRECTION (DEG FM TRUE N. CW)	--	340	340	320	180	260	260

PARAMETER NAME (UNITS)	STATION 15 6/ 4/79	STATION 16 6/ 4/79	STATION 17 6/ 4/79	STATION 18 6/ 5/79	STATION 19 6/ 5/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	[illegible]	29.0	29.0	28.0	27.0
CLOUD COVER (PERCENT)	20.	40.	20.	0.	7.
WIND VELOCITY (MPH)	10.0	5.0	0.0	0.0	0.0
WIND DIRECTION (DEG FM TRUE N. CW)	240	220	--	--	--

TABLE B-4

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 7/19/79	STATION 02 7/19/79	STATION 03 7/18/79	STATION 04 7/18/79	STATION 05 7/18/79	STATION 06 7/18/79	STATION 07 7/18/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	35.0	35.0	28.0	28.0	28.0	27.0	28.0
CLOUD COVER (PERCENT)	85.	15.	100.	100.	95.	95.	30.
WIND VELOCITY (MPH)	5.0	10.0	2.5	0.0	0.0	2.5	2.5
WIND DIRECTION (DEG FM TRUE N, CW)	200	220	220	--	--	300	220

PARAMETER NAME (UNITS)	STATION 08 7/17/79	STATION 09 7/17/79	STATION 10 7/17/79	STATION 11 7/17/79	STATION 12 7/18/79	STATION 13 7/16/79	STATION 14 7/16/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	35.0	34.0	35.0	32.0	32.0	34.0	33.0
CLOUD COVER (PERCENT)	20.	60.	10.	15.	90.	40.	10.
WIND VELOCITY (MPH)	0.0	0.0	0.0	5.0	2.5	0.0	5.0
WIND DIRECTION (DEG FM TRUE N, CW)	--	--	--	300	80	--	300

PARAMETER NAME (UNITS)	STATION 15 7/16/79	STATION 16 7/16/79	STATION 17 7/16/79	STATION 18 7/17/79	STATION 19 7/17/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	32.0	33.0	33.0	30.0	30.0
CLOUD COVER (PERCENT)	20.	40.	20.	15.	80.
WIND VELOCITY (MPH)	7.5	2.5	0.0	0.0	7.5
WIND DIRECTION (DEG FM TRUE N, CW)	220	200	--	--	220

TABLE B-5

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79	STATION 05 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	30.0	30.0	30.0	33.0	31.0	32.0	33.0
CLOUD COVER (PERCENT)	5.	70.	50.	50.	50.	20.	40.
WIND VELOCITY (MPH)	5.0	5.0	0.0	0.0	5.0	5.0	0.0
WIND DIRECTION (DEG FM TRUE N, CW)	150	340	--	--	340	360	--

PARAMETER NAME (UNITS)	STATION 08 8/14/79	STATION 09 8/14/79	STATION 10 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79	STATION 13 8/13/79	STATION 14 8/16/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	34.0	32.5	31.0	31.0	29.0	31.0	30.0
CLOUD COVER (PERCENT)	20.	50.	20.	40.	0.	50.	0.
WIND VELOCITY (MPH)	2.5	7.5	5.0	7.5	5.0	5.0	0.0
WIND DIRECTION (DEG FM TRUE N, CW)	300	340	340	300	40	270	--

PARAMETER NAME (UNITS)	STATION 15 8/13/79	STATION 16 8/13/79	STATION 17 8/13/79	STATION 18 8/14/79	STATION 19 8/14/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	31.5	31.0	29.0	31.0	30.0
CLOUD COVER (PERCENT)	40.	60.	30.	10.	10.
WIND VELOCITY (MPH)	5.0	0.0	0.0	5.0	0.0
WIND DIRECTION (DEG FM TRUE N, CW)	340	--	--	30	--

TABLE B-6

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 9/26/79	STATION 02 9/26/79	STATION 03 9/26/79	STATION 04 9/26/79	STATION 05 9/26/79	STATION 06 9/26/79	STATION 07 9/25/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	21.0	21.0	20.5	20.0	20.0	21.0	21.0
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.	100.	100.
WIND VELOCITY (MPH)	0.0	5.0	2.5	0.0	0.0	10.0	10.0
WIND DIRECTION (DEG FM TRUE N, CW)	--	10	10	--	--	10	40

PARAMETER NAME (UNITS)	STATION 08 9/25/79	STATION 09 9/25/79	STATION 10 9/25/79	STATION 11 9/25/79	STATION 12 9/24/79	STATION 13 9/24/79	STATION 14 9/24/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	21.0	20.0	21.0	20.0	21.0	21.0	21.0
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.	100.	100.
WIND VELOCITY (MPH)	10.0	7.5	7.5	7.5	7.5	12.5	7.5
WIND DIRECTION (DEG FM TRUE N, CW)	40	40	40	40	50	40	50

PARAMETER NAME (UNITS)	STATION 15 9/24/79	STATION 16 9/24/79	STATION 17 9/24/79	STATION 18 9/25/79	STATION 19 9/25/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	21.0	21.0	22.0	20.0	20.0
CLOUD COVER (PERCENT)	100.	100.	100.	100.	100.
WIND VELOCITY (MPH)	10.0	10.0	5.0	5.0	7.5
WIND DIRECTION (DEG FM TRUE N, CW)	60	40	40	40	40

TABLE B-7

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-6/1979)

MISCELLANEOUS DATA

PARAMETER NAME (UNITS)	STATION 01 12/ 5/79	STATION 02 12/ 5/79	STATION 03 12/ 5/79	STATION 04 12/ 5/79	STATION 05 12/ 5/79	STATION 06 12/ 6/79	STATION 07 12/ 6/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	8.0	12.0	16.0	17.0	18.0	19.0	16.0
CLOUD COVER (PERCENT)	40.	20.	10.	10.	10.	95.	100.
WIND VELOCITY (MPH)	0.0	2.5	5.0	5.0	2.5	0.0	0.0
WIND DIRECTION (DEG FM TRUE N. CW)	--	190	190	140	140	--	--

PARAMETER NAME (UNITS)	STATION 08 12/ 6/79	STATION 09 12/ 6/79	STATION 10 12/ 6/79	STATION 11 12/ 5/79	STATION 12 12/ 6/79	STATION 13 12/ 6/79	STATION 14 12/ 3/79
METEOROLOGICAL DATA							
AIR TEMPERATURE (DEG C)	16.0	16.0	18.0	18.0	17.0	11.0	8.0
CLOUD COVER (PERCENT)	100.	100.	100.	95.	*****	95.	90.
WIND VELOCITY (MPH)	0.0	10.0	0.0	5.0	5.0	10.0	5.0
WIND DIRECTION (DEG FM TRUE N. CW)	--	300	--	140	200	30	30

PARAMETER NAME (UNITS)	STATION 15 12/ 3/79	STATION 16 12/ 3/79	STATION 17 12/ 3/79	STATION 18 12/ 4/79	STATION 19 12/ 4/79
METEOROLOGICAL DATA					
AIR TEMPERATURE (DEG C)	10.0	11.5	6.5	8.5	12.0
CLOUD COVER (PERCENT)	70.	80.	60.	80.	80.
WIND VELOCITY (MPH)	10.0	2.5	7.5	5.0	0.0
WIND DIRECTION (DEG FM TRUE N. CW)	60	50	70	50	--

APPENDIX C

IN SITU DATA

LIST OF TABLES

TABLE C-1a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 1 (2/19-22/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	7.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	--	--	--	0.10	--	--	--
CURRENT SPEED (FPS)	--	--	--	3.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	10.	10.	10.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	4.0	--	0.3	1.0	6.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.6	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.5	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	7.5	7.5	7.5	--	7.5	7.5	7.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	61.	61.	65.	--	61.	61.	65.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.6	12.7	12.9	--	12.8	12.8	12.9
PH (STD UNITS)	7.00	--	7.00	--	7.10	7.10	7.00

TABLE C-1b

PARAMETER NAME (UNITS)	STATION 01 2/21/79	STATION 01 2/21/79	STATION 01 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	7.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	0.10
CURRENT SPEED (FPS)	--	--	--	--	--	--	3.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	90.	90.	90.	5.	5.	5.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	6.0	0.3	1.0	4.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	0.5
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	1.7
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	7.5	7.5	7.5	8.0	8.0	7.5	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	61.	63.	66.	60.	60.	65.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.7	12.8	13.0	12.7	12.9	12.9	--
PH (STD UNITS)	7.00	--	7.00	7.10	--	7.10	--

TABLE C-1c

PARAMETER NAME (UNITS)	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 02 2/21/79	STATION 03 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	4.0	4.0	4.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	90.	90.	90.	10.
SAMPLE DEPTH (METERS)	0.3	1.0	4.0	0.3	1.0	3.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	7.5	7.5	8.0	8.0	8.0	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	60.	61.	63.	60.	60.	63.	63.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.6	12.9	13.0	13.0	12.9	13.1	12.9
PH (STD UNITS)	7.10	7.10	7.10	7.10	--	7.10	6.90

TABLE C-1d

PARAMETER NAME (UNITS)	STATION 03 2/21/79	STATION 03 2/21/79	STATION 03 2/21/79	STATION 03 2/21/79	STATION 03 2/21/79	STATION 03 2/21/79	STATION 03 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	7.0	7.0	7.0	7.0	5.0
WAVE HEIGHT (METERS)	--	--	0.00	--	--	--	--
CURRENT SPEED (FPS)	--	--	3.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	10.	10.	50.	50.	50.	50.	90.
SAMPLE DEPTH (METERS)	1.0	4.0	--	0.3	1.0	6.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.7	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.7	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	7.5	--	8.0	8.0	8.0	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	64.	68.	--	60.	62.	66.	60.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	13.0	13.1	--	12.9	13.0	13.1	13.0
PH (STD UNITS)	--	6.90	--	7.10	7.10	7.10	7.10

TABLE C-1e

PARAMETER NAME (UNITS)	STATION 03 2/21/79	STATION 03 2/21/79	STATION 04 2/21/79	STATION 04 2/21/79	STATION 04 2/21/79	STATION 04 2/21/70	STATION 04 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	6.0	6.0	6.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	--	--	--	0.10	--
CURRENT SPEED (FPS)	--	--	--	--	--	3.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	90.	10.	10.	10.	50.	50.
SAMPLE DEPTH (METERS)	1.0	4.0	0.3	1.0	5.0	--	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	0.5	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	1.4	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	8.0	8.0	8.0	8.0	--	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	63.	66.	74.	74.	78.	--	64.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	13.1	13.1	13.0	13.0	13.0	--	12.9
PH (STD UNITS)	--	7.10	7.30	--	7.30	--	7.10

TABLE C-1f

PARAMETER NAME (UNITS)	STATION 04 2/21/79	STATION 04 2/21/79	STATION 04 2/21/79	STATION 04 2/21/79	STATION 04 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	6.0	6.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	50.	50.	90.	90.	90.	10.	10.
SAMPLE DEPTH (METERS)	1.0	5.0	0.3	1.0	5.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	8.0	8.0	8.0	8.0	8.0	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	67.	74.	60.	64.	66.	80.	80.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.9	12.9	13.1	13.1	13.1	12.2	12.4
PH (STD UNITS)	7.10	7.00	7.00	--	7.00	7.20	--

TABLE C-1g

PARAMETER NAME (UNITS)	STATION 05 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79	STATION 05 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	6.0	5.0	5.0	6.0	6.0
WAVE HEIGHT (METERS)	--	0.00	--	--	--	--	--
CURRENT SPEED (FPS)	--	3.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (X*FROM R-BK LK UPST)	10.	50.	50.	50.	50.	90.	90.
SAMPLE DEPTH (METERS)	4.0	--	0.3	1.0	4.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.5	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.4	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	--	8.0	8.0	8.0	8.0	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	80.	--	80.	80.	83.	80.	80.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.5	--	12.5	12.5	12.4	12.1	12.2
PH (STD UNITS)	7.20	--	7.10	7.10	7.10	7.20	--

TABLE C-1h

PARAMETER NAME (UNITS)	STATION 05 2/21/79	STATION 06 2/21/79	STATION 06 2/21/79	STATION 06 2/21/79	STATION 06 2/21/79	STATION 06 2/21/79	STATION 06 2/21/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	6.0	6.0	10.0	10.0
WAVE HEIGHT (METERS)	--	0.10	--	--	--	--	--
CURRENT SPEED (FPS)	--	2.5	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	50.	50.	50.	50.	90.	90.
SAMPLE DEPTH (METERS)	5.0	--	0.3	1.0	4.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.5	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.4	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	--	8.0	8.0	8.0	8.5	8.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	83.	--	80.	80.	80.	80.	80.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.5	--	12.3	12.2	12.4	11.9	12.0
PH (STD UNITS)	7.10	--	7.20	7.20	7.20	7.20	--

TABLE C-11

PARAMETER NAME (UNITS)	STATION 06 2/21/79	STATION 07 2/20/79	STATION 07 2/20/79	STATION 07 2/20/79	STATION 07 2/20/79	STATION 07 2/20/79	STATION 07 2/20/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	10.0	3.0	3.0	8.0	8.0	8.0	8.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	--
CURRENT SPEED (FPS)	--	--	--	0.5	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	5.	5.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	9.0	1.0	2.0	--	1.0	4.0	7.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.7	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.8	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.0	10.0	10.0	--	10.0	9.0	9.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	83.	91.	91.	--	91.	92.	95.
OXIDATION REDUCTION POTENTIAL (MV)	--	430	430	--	410	420	420
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.4	10.6	10.6	--	10.6	10.5	10.4
PH (STD UNITS)	7.20	7.40	7.40	--	7.40	7.50	7.40

TABLE C-1j

PARAMETER NAME (UNITS)	STATION 07 2/20/79	STATION 07 2/20/79	STATION 08 2/20/79	STATION 08 2/20/79	STATION 08 2/20/79	STATION 09 2/20/79	STATION 09 2/20/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	2.0	2.0	3.0	3.0	3.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	0.00	--	--	0.05	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	95.	95.	50.	50.	50.	40.	40.
SAMPLE DEPTH (METERS)	0.3	1.0	--	1.0	2.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.6	--	--	0.6	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.5	--	--	1.5	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	10.0	9.5	--	10.0	9.5	--	9.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	91.	92.	--	88.	90.	--	79.
OXIDATION REDUCTION POTENTIAL (MV)	420	420	--	410	400	--	430
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.2	10.4	--	10.4	10.2	--	11.0
PH (STD UNITS)	7.60	7.60	--	7.50	7.40	--	7.60

TABLE C-1k

PARAMETER NAME (UNITS)	STATION 09 2/20/79	STATION 09 2/20/79	STATION 10 2/20/79	STATION 10 2/20/79	STATION 10 2/20/79	STATION 10 2/20/79	STATION 11 2/20/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	7.0	7.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	--	--	0.03	--	--	--	0.05
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	40.	40.	60.	60.	60.	60.	[illegible]
SAMPLE DEPTH (METERS)	3.0	5.0	--	1.0	3.0	6.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.6	--	--	--	0.7
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.3	--	--	--	1.5
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	8.5	8.5	--	9.0	8.5	8.5	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	80.	80.	--	79.	80.	80.	--
OXIDATION REDUCTION POTENTIAL (MV)	440	450	--	420	420	430	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.9	10.8	--	10.9	11.1	11.2	--
PH (STD UNITS)	7.40	7.40	--	7.40	7.20	7.10	--

TABLE C-11

PARAMETER NAME (UNITS)	STATION 11 2/20/79	STATION 11 2/20/79	STATION 11 2/20/79	STATION 12 2/22/79	STATION 12 2/22/79	STATION 12 2/22/79	STATION 12 2/22/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	7.0	2.0	2.0	1.2	1.2
WAVE HEIGHT (METERS)	--	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	--	--	--	--	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	70.	70.	70.	30.	30.	50.	50.
SAMPLE DEPTH (METERS)	1.0	3.0	6.0	0.3	1.0	--	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	1.2	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	1.2	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	9.0	8.5	8.0	13.0	12.5	--	13.2
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	80.	80.	93.	94.	--	93.
OXIDATION REDUCTION POTENTIAL (MV)	440	440	430	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	11.3	11.3	11.4	10.3	10.2	--	9.9
PH (STD UNITS)	7.50	7.10	7.00	--	--	--	--

TABLE C-1m

PARAMETER NAME (UNITS)	STATION 12 2/22/79	STATION 12 2/22/79	STATION 12 2/22/79	STATION 12 2/22/79	STATION 13 2/19/79	STATION 13 2/19/79	STATION 13 2/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	1.2	2.5	2.5	2.5	10.0	10.0	10.0
WAVE HEIGHT (METERS)	--	--	--	--	0.10	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	80.	80.	80.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	0.3	1.0	1.5	--	1.0	5.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	0.6	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.5	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.8	13.0	13.0	12.0	--	10.0	9.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	93.	97.	98.	95.	--	75.	79.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	450	450
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.9	10.2	10.2	10.0	--	10.4	10.6
PH (STD UNITS)	7.70	--	--	--	--	7.70	7.40

TABLE C-1n

PARAMETER NAME (UNITS)	STATION 13 2/19/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	10.0	4.0	4.0	4.0	2.5	2.5	2.5
WAVE HEIGHT (METERS)	--	--	--	--	0.00	--	--
CURRENT SPEED (FPS)	--	--	--	--	0.0	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	35.	35.	35.	50.	50.	50.
SAMPLE DEPTH (METERS)	9.0	0.3	1.0	3.0	--	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	1.6	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	2.5	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	9.0	13.0	13.0	13.0	--	13.0	13.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	87.	174.	176.	180.	--	174.	176.
OXIDATION REDUCTION POTENTIAL (MV)	440	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.7	9.6	9.3	9.3	--	9.6	9.3
PH (STD UNITS)	7.50	--	--	--	--	--	7.70

TABLE C-1o

PARAMETER NAME (UNITS)	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 14 2/22/79	STATION 15 2/19/79	STATION 15 2/19/79	STATION 15 2/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	2.5	3.0	3.0	3.0	4.0	4.0	4.0
WAVE HEIGHT (METERS)	--	--	--	--	0.20	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	70.	70.	70.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.5	0.3	1.0	2.0	--	1.0	2.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	0.6	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.5	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	13.0	13.0	13.0	13.0	--	10.5	10.1
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	176.	176.	176.	176.	--	90.	91.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	400	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.3	9.7	9.5	9.4	--	10.2	10.2
PH (STD UNITS)	--	--	--	--	--	7.70	--

TABLE C-1p

PARAMETER NAME (UNITS)	STATION 15 2/19/79	STATION 16 2/19/79	STATION 16 2/19/79	STATION 16 2/19/79	STATION 16 2/19/79	STATION 16 2/19/79	STATION 16 2/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	5.0	8.0	6.0	6.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	--	0.05	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	5.	5.	50.	50.	50.	75.
SAMPLE DEPTH (METERS)	3.0	1.0	4.0	--	1.0	5.0	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.8	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.8	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	10.0	10.5	10.8	--	10.5	10.0	10.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	91.	97.	103.	--	101.	104.	101.
OXIDATION REDUCTION POTENTIAL (MV)	400	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.0	10.4	10.2	--	10.0	10.0	10.0
PH (STD UNITS)	7.70	7.60	7.60	--	7.60	7.70	7.60

TABLE C-1q

PARAMETER NAME (UNITS)	STATION 16 2/19/79	STATION 17 2/19/79	STATION 17 2/19/79	STATION 17 2/19/79	STATION 17 2/19/79	STATION 17 2/19/79	STATION 17 2/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	4.0	4.0	7.0	7.0	7.0	2.0
WAVE HEIGHT (METERS)	--	--	--	0.10	--	--	--
CURRENT SPEED (FPS)	--	--	--	1.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	75.	5.	5.	50.	50.	50.	95.
SAMPLE DEPTH (METERS)	2.5	1.0	3.0	--	1.0	6.0	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.8	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	2.7	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	10.5	10.5	10.5	--	10.5	10.5	10.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	101.	101.	103.	--	97.	90.	101.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.0	10.4	10.0	--	9.8	9.8	10.4
PH (STD UNITS)	7.70	7.80	7.80	--	7.80	7.80	7.80

TABLE C-1r

PARAMETER NAME (UNITS)	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	4.0	4.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCM R-BK LK UPST)	10.	10.	10.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	3.0	--	0.3	1.0	4.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.6	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.8	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	9.0	9.0	9.0	--	9.0	9.0	9.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	77.	77.	77.	--	74.	74.	77.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	11.3	11.2	11.1	--	11.1	11.0	11.1
PH (STD UNITS)	7.40	--	7.30	--	7.40	7.40	7.40

TABLE C-1s

PARAMETER NAME (UNITS)	STATION 18 2/20/79	STATION 18 2/20/79	STATION 18 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	3.0	3.0	3.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	0.00
CURRENT SPEED (FPS)	--	--	--	--	--	--	2.5
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	90.	90.	10.	10.	10.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	5.0	0.3	1.0	2.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	0.7
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	1.4
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	9.0	9.0	9.0	9.0	9.0	9.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	74.	774.	82.	73.	77.	79.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	11.7	11.4	11.2	11.2	11.0	10.6	--
PH (STD UNITS)	7.20	--	7.20	7.20	7.20	7.20	--

TABLE C-1t

PARAMETER NAME (UNITS)	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79	STATION 19 2/20/79
HYDROLOGICAL DATA						
TOTAL DEPTH (METERS)	5.0	5.0	5.0	3.0	3.0	3.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--
PHYSICAL DATA						
MISCELLANEOUS DATA						
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	90.	90.	90.
SAMPLE DEPTH (METERS)	0.3	1.0	4.0	0.3	1.0	2.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--
FIELD MEASUREMENTS						
WATER TEMPERATURE (DEG C)	9.0	9.0	9.0	9.0	9.0	9.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	73.	77.	78.	77.	78.	78.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	11.0	10.7	10.7	10.2	10.6	10.6
PH (STD UNITS)	7.30	7.30	7.30	7.20	7.20	7.20

TABLE C-2a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 4/ 4/79	STATION 01 4/ 4/79	STATION 02 4/ 4/79	STATION 02 4/ 4/79	STATION 03 4/ 4/79	STATION 03 4/ 4/79	STATION 04 4/ 4/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	6.0	7.0	7.0	6.0
WAVE HEIGHT (METERS)	0.10	--	0.10	--	0.10	--	0.10
CURRENT SPEED (FPS)	4.0	--	3.5	--	3.5	--	2.5
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	0.4	--	0.3	--	0.3	--	0.5
DEPTH OF 1% SURFACE LIGHT (METERS)	0.8	--	0.8	--	0.7	--	1.6
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	15.0	--	15.0	--	15.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	54.	--	54.	--	58.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	9.8	--	9.8	--	9.8	--
PH (STD UNITS)	--	7.20	--	7.10	--	7.20	--

TABLE C-2b

PARAMETER NAME (UNITS)	STATION 04 4/ 4/79	STATION 05 4/ 4/79	STATION 05 4/ 4/79	STATION 06 4/ 4/79	STATION 06 4/ 4/79	STATION 07 4/ 3/79	STATION 07 4/ 3/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	5.0	5.0	6.0	6.0	10.0	10.0
WAVE HEIGHT (METERS)	--	0.10	--	0.02	--	0.00	--
CURRENT SPEED (FPS)	--	2.5	--	2.5	--	1.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.5	--	0.5	--	0.6	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.1	--	1.4	--	1.6	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	15.0	--	15.0	--	16.0	--	17.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	58.	--	66.	--	65.	--	75.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	4.00
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.0	--	10.0	--	9.6	--	9.2
PH (STD UNITS)	7.20	--	7.30	--	7.20	--	7.30

TABLE C-2c

PARAMETER NAME (UNITS)	STATION 07 4/ 3/79	STATION 07 4/ 3/79	STATION 07 4/ 3/79	STATION 07 4/ 3/79	STATION 08 4/ 3/79	STATION 08 4/ 3/79	STATION 08 4/ 3/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	10.0	10.0	10.0	10.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	0.00	--	--
CURRENT SPEED (FPS)	--	--	--	--	0.5	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	3.0	5.0	7.0	9.0	--	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	0.6	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.6	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	17.0	17.0	17.0	17.0	--	17.0	17.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	81.	81.	82.	--	87.	87.
OXIDATION REDUCTION POTENTIAL (MV)	400	400	400	400	--	420	420
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.1	9.1	9.1	9.1	--	8.8	8.8
PH (STD UNITS)	7.30	7.20	7.10	7.10	--	7.10	7.10

TABLE C-2d

PARAMETER NAME (UNITS)	STATION 08 4/ 3/79	STATION 09 4/ 3/79	STATION 09 4/ 3/79	STATION 09 4/ 3/79	STATION 09 4/ 3/79	STATION 10 4/ 2/79	STATION 10 4/ 2/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	6.0	6.0	6.0	6.0	1.5	1.5
WAVE HEIGHT (METERS)	--	0.10	--	--	--	0.10	--
CURRENT SPEED (FPS)	--	--	--	--	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	4.0	--	1.0	3.0	5.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.7	--	--	--	0.6	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.3	--	--	--	1.1	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	17.0	--	18.0	18.0	18.0	--	18.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	91.	--	74.	78.	78.	--	71.
OXIDATION REDUCTION POTENTIAL (MV)	420	--	390	390	400	--	380
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.8	--	8.9	8.8	8.6	--	9.0
PH (STD UNITS)	7.20	--	7.30	7.40	7.00	--	7.30

TABLE C-2e

PARAMETER NAME (UNITS)	STATION 11 4/ 3/79	STATION 11 4/ 3/79	STATION 11 4/ 3/79	STATION 11 4/ 3/79	STATION 13 4/ 2/79	STATION 13 4/ 2/79	STATION 13 4/ 2/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	6.0	9.0	9.0	9.0
WAVE HEIGHT (METERS)	0.30	--	--	--	0.10	--	--
CURRENT SPEED (FPS)	0.0	--	--	--	0.0	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	85.	85.	85.	85.	40.	40.	40.
SAMPLE DEPTH (METERS)	--	1.0	3.0	5.0	--	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	0.8	--	--	--	1.0	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.8	--	--	--	2.0	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	19.0	18.5	18.0	--	19.0	19.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	89.	90.	89.	--	106.	106.
OXIDATION REDUCTION POTENTIAL (MV)	--	290	310	310	--	340	340
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	9.0	8.9	8.6	--	10.6	10.0
PH (STD UNITS)	--	7.10	7.10	7.10	--	8.10	8.00

TABLE C-2f

PARAMETER NAME (UNITS)	STATION 13 4/ 2/79	STATION 13 4/ 2/79	STATION 13 4/ 2/79	STATION 14 4/ 2/79	STATION 14 4/ 2/79	STATION 15 4/ 2/79	STATION 15 4/ 2/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	9.0	9.0	9.0	2.2	2.2	3.0	3.0
WAVE HEIGHT (METERS)	--	--	--	0.10	--	0.20	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	40.	40.	40.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	5.0	7.0	8.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	1.2	--	1.0	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	2.2	--	2.3	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	18.0	16.0	16.0	--	22.0	--	20.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	106.	110.	110.	--	201.	--	105.
OXIDATION REDUCTION POTENTIAL (MV)	360	370	--	--	420	--	280
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.9	9.5	9.2	--	9.0	--	9.8
PH (STD UNITS)	7.40	7.40	--	--	8.40	--	7.80

TABLE C-2g

PARAMETER NAME (UNITS)	STATION 15 4/ 2/79	STATION 16 4/ 2/79	STATION 16 4/ 2/79	STATION 17 4/ 2/79	STATION 17 4/ 2/79	STATION 18 4/ 3/79	STATION 18 4/ 3/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	3.0	5.0	5.0	4.5	4.5
WAVE HEIGHT (METERS)	--	0.10	--	0.00	--	0.20	--
CURRENT SPEED (FPS)	--	0.0	--	2.5	--	2.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	2.0	--	1.0	--	1.0	--	[illegible]
SECCHI DISK TRANSPARENCY (METERS)	--	1.5	--	1.6	--	0.9	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	3.6	--	3.4	--	2.5	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	19.0	--	18.0	--	18.0	--	19.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	110.	--	117.	--	116.	--	101.
OXIDATION REDUCTION POTENTIAL (MV)	340	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.6	--	8.8	--	8.4	--	8.4
PH (STD UNITS)	7.80	--	7.40	--	7.80	--	7.80

TABLE C-2h

PARAMETER NAME (UNITS)	STATION 19 4/ 3/79	STATION 19 4/ 3/79
HYDROLOGICAL DATA		
TOTAL DEPTH (METERS)	4.0	4.0
WAVE HEIGHT (METERS)	0.20	--
CURRENT SPEED (FPS)	2.0	--
PHYSICAL DATA		
MISCELLANEOUS DATA		
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.
SAMPLE DEPTH (METERS)	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.9	--
DEPTH OF 1% SURFACE LIGHT (METERS)	2.0	--
FIELD MEASUREMENTS		
WATER TEMPERATURE (DEG C)	--	19.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	101.
OXIDATION REDUCTION POTENTIAL (MV)	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	8.3
PH (STD UNITS)	--	7.80

TABLE C-3a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 6/ 6/79	STATION 01 6/ 6/79	STATION 02 6/ 6/79	STATION 02 6/ 6/79	STATION 03 6/ 6/79	STATION 03 6/ 6/79	STATION 04 6/ 6/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	6.0	6.0	4.5
WAVE HEIGHT (METERS)	0.00	--	0.10	--	0.20	--	0.00
CURRENT SPEED (M/S)	2.3	--	2.5	--	2.5	--	2.5
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	0.7	--	0.6	--	0.7	--	0.7
DEPTH OF 1% SURFACE LIGHT (METERS)	1.3	--	1.9	--	1.8	--	1.5
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	24.0	--	24.0	--	24.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	51.	--	53.	--	53.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	7.6	--	7.7	--	7.8	--
PH (STD UNITS)	--	6.90	--	7.00	--	6.90	--

TABLE C-3b

PARAMETER NAME (UNITS)	STATION 04 6/ 6/79	STATION 05 6/ 6/79	STATION 05 6/ 6/79	STATION 06 6/ 6/79	STATION 06 6/ 6/79	STATION 07 6/ 5/79	STATION 07 6/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.5	4.0	4.0	5.0	5.0	10.0	10.0
WAVE HEIGHT (METERS)	--	0.00	--	0.00	--	0.00	--
CURRENT SPEED (M/S)	--	1.0	--	0.4	--	1.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.8	--	0.8	--	0.7	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.9	--	1.9	--	1.8	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	24.0	--	24.0	--	24.0	--	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	56.	--	66.	--	61.	--	68.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	400
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.2	--	7.1	--	7.1	--	7.5
PH (STD UNITS)	7.00	--	7.00	--	6.90	--	7.30

TABLE C-3c

PARAMETER NAME (UNITS)	STATION 07 6/ 5/79	STATION 07 6/ 5/79	STATION 07 6/ 5/79	STATION 07 6/ 5/79	STATION 08 6/ 5/79	STATION 08 6/ 5/79	STATION 08 6/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	10.0	10.0	10.0	10.0	3.0	3.0	3.0
WAVE HEIGHT (METERS)	--	--	--	--	0.00	--	--
CURRENT SPEED (M/S)	--	--	--	--	0.7	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	105.	105.	105.
SAMPLE DEPTH (METERS)	3.0	5.0	7.0	9.0	--	1.0	2.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	0.8	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.8	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	26.0	26.0	--	--	--	25.0	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	67.	69.	--	--	--	68.	70.
OXIDATION REDUCTION POTENTIAL (MV)	300	360	350	350	--	370	270
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.6	7.4	--	--	--	7.2	7.1
PH (STD UNITS)	7.20	7.10	7.10	6.40	--	7.20	6.80

TABLE C-3d

PARAMETER NAME (UNITS)	STATION 09 6/ 5/79	STATION 09 6/ 5/79	STATION 09 6/ 5/79	STATION 09 6/ 5/79	STATION 10 6/ 5/79	STATION 10 6/ 5/79	STATION 10 6/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.3	4.5	4.5	4.5	7.0	7.0	7.0
WAVE HEIGHT (METERS)	0.10	--	--	--	0.20	--	--
CURRENT SPEED (M/S)	0.0	--	--	--	0.0	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	3.0	4.0	--	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	0.6	--	--	--	0.6	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.4	--	--	--	1.3	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	26.0	25.0	25.0	--	25.0	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	67.	68.	68.	--	63.	68.
OXIDATION REDUCTION POTENTIAL (MV)	--	400	410	410	--	400	400
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	8.8	6.7	6.3	--	7.3	6.7
PH (STD UNITS)	--	7.40	7.20	7.10	--	7.30	7.00

TABLE C-3e

PARAMETER NAME (UNITS)	STATION 10 6/ 5/79	STATION 10 6/ 5/79	STATION 11 6/ 5/79	STATION 11 6/ 5/79	STATION 11 6/ 5/79	STATION 11 6/ 5/79	STATION 12 6/ 6/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	6.0	6.0	6.0	6.0	1.2
WAVE HEIGHT (METERS)	--	--	0.10	--	--	--	0.00
CURRENT SPEED (M/S)	--	--	0.0	--	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	80.	80.	80.	80.	50.
SAMPLE DEPTH (METERS)	5.0	6.0	--	1.0	3.0	5.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.8	--	--	--	1.2
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	2.0	--	--	--	1.2
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	25.0	25.0	--	27.0	26.0	25.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	69.	70.	--	77.	78.	82.	--
OXIDATION REDUCTION POTENTIAL (MV)	400	400	--	340	340	380	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.2	6.2	--	7.2	6.6	5.9	--
PH (STD UNITS)	7.00	7.00	--	8.00	7.10	7.20	--

TABLE C-3f

PARAMETER NAME (UNITS)	STATION 12 6/ 6/79	STATION 13 6/ 4/79	STATION 13 6/ 4/79	STATION 13 6/ 4/79	STATION 13 6/ 4/79	STATION 13 6/ 4/79	STATION 13 6/ 4/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	1.2	9.0	9.0	9.0	9.0	9.0	9.0
WAVE HEIGHT (METERS)	--	0.50	--	--	--	--	--
CURRENT SPEED (M/S)	--	0.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	40.	40.	40.	40.	40.	40.
SAMPLE DEPTH (METERS)	1.0	--	1.0	3.0	5.0	7.0	8.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.4	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	2.6	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	--	28.0	27.0	26.0	25.0	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	97.	--	136.	136.	145.	148.	149.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	340	340	360	350	370
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.6	--	10.3	8.8	7.4	6.5	6.2
PH (STD UNITS)	--	--	8.50	8.50	7.90	7.80	7.70

TABLE C-3g

PARAMETER NAME (UNITS)	STATION 14 6/ 4/79	STATION 14 6/ 4/79	STATION 15 6/ 4/79	STATION 15 6/ 4/79	STATION 15 6/ 4/79	STATION 15 6/ 4/79	STATION 15 6/ 4/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	4.0	7.0	7.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	0.20	--	0.50	--	--	--	--
CURRENT SPEED (M/S)	0.0	--	0.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	40.	40.	40.	40.	40.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	3.0	5.0	6.0
SECCHI DISK TRANSPARENCY (METERS)	1.0	--	1.2	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.8	--	2.7	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	17.0	--	28.0	26.0	26.0	26.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	226.	--	130.	135.	135.	135.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	310	320	310	310
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	7.1	--	9.5	8.8	8.6	8.0
PH (STD UNITS)	--	8.40	--	8.40	7.90	7.90	7.90

TABLE C-3h

PARAMETER NAME (UNITS)	STATION 16 6/ 4/79	STATION 16 6/ 4/79	STATION 17 6/ 4/79	STATION 17 6/ 4/79	STATION 18 6/ 5/79	STATION 18 6/ 5/79	STATION 19 6/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	6.0	6.0	5.0	5.0	4.0
WAVE HEIGHT (METERS)	0.02	--	0.10	--	0.01	--	0.00
CURRENT SPEED (M/S)	0.0	--	1.5	--	2.0	--	2.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	1.0	--	1.2	--	0.9	--	0.8
DEPTH OF 1% SURFACE LIGHT (METERS)	2.0	--	2.0	--	2.0	--	1.9
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	26.0	--	25.0	--	26.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	127.	--	105.	--	93.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	6.8	--	7.1	--	7.1	--
PH (STD UNITS)	--	7.40	--	7.40	--	7.50	--

TABLE C-31

PARAMETER NAME (UNITS)	STATION 19 6/ 5/79
HYDROLOGICAL DATA	
TOTAL DEPTH (METERS)	4.0
WAVE HEIGHT (METERS)	--
CURRENT SPEED (M/S)	--
PHYSICAL DATA	
MISCELLANEOUS DATA	
X-SECTION LOC (%FROM R-BK LK UPST)	50.
SAMPLE DEPTH (METERS)	1.0
SECCHI DISK TRANSPARENCY (METERS)	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--
FIELD MEASUREMENTS	
WATER TEMPERATURE (DEG C)	26.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	90.
OXIDATION REDUCTION POTENTIAL (MV)	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.9
PH (STD UNITS)	7.40

TABLE C-4a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	3.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	0.05	--	--	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	10.	10.	10.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	2.0	--	0.3	1.0	4.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	2.5	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	27.5	27.0	--	29.0	27.5	27.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	60.	62.	62.	--	60.	60.	60.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.2	7.3	7.3	--	7.2	7.3	6.9
PH (STD UNITS)	7.20	7.30	7.30	--	7.30	7.30	7.30

TABLE C-4b

PARAMETER NAME (UNITS)	STATION 01 7/19/79	STATION 01 7/19/79	STATION 01 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	3.0	4.0	4.0	4.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	0.00
CURRENT SPEED (FPS)	--	--	--	--	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	90.	90.	10.	10.	10.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	2.0	0.3	1.0	3.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	2.4
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	28.0	27.0	29.0	28.0	28.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	60.	61.	62.	63.	64.	66.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.3	7.3	7.3	6.8	6.7	6.9	--
PH (STD UNITS)	6.80	7.20	7.20	6.90	6.90	7.00	--

TABLE C-4c

PARAMETER NAME (UNITS)	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 02 7/19/79	STATION 03 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	3.0	3.0	3.0	4.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	90.	90.	90.	10.
SAMPLE DEPTH (METERS)	1.0	4.0	33.0	0.3	1.0	2.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	29.0	29.0	28.0	28.0	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	64.	64.	63.	62.	65.	65.	67.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.0	6.6	7.3	6.9	7.3	7.4	7.8
PH (STD UNITS)	7.00	7.10	7.00	6.90	7.00	7.00	6.80

TABLE C-4d

PARAMETER NAME (UNITS)	STATION 03 7/18/79	STATION 03 7/18/79	STATION 03 7/18/79	STATION 03 7/18/79	STATION 03 7/18/79	STATION 03 7/18/79	STATION 03 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
WAVE HEIGHT (METERS)	--	--	0.00	--	--	--	--
CURRENT SPEED (FPS)	--	--	2.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	10.	10.	50.	50.	50.	50.	90.
SAMPLE DEPTH (METERS)	1.0	3.0	--	0.3	1.0	3.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	2.0	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	27.5	27.0	--	27.5	27.5	27.5	27.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	67.	67.	--	67.	67.	67.	67.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.0	8.1	--	8.0	8.1	8.1	7.5
PH (STD UNITS)	7.10	7.00	--	6.80	7.10	7.20	6.80

TABLE C-4e

PARAMETER NAME (UNITS)	STATION 03 7/18/79	STATION 03 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	4.0	5.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	--	--	--	--	--	2.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	90.	10.	10.	10.	50.	50.
SAMPLE DEPTH (METERS)	1.0	3.0	0.3	1.0	4.0	--	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	1.4	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	27.0	27.0	28.0	28.0	28.0	--	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	67.	67.	122.	120.	118.	--	71.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.7	7.8	6.9	7.1	7.2	--	7.2
PH (STD UNITS)	6.90	6.90	6.90	7.00	7.00	--	6.90

TABLE C-4f

PARAMETER NAME (UNITS)	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 04 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	5.0	4.0	4.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	90.	90.	90.	10.	10.
SAMPLE DEPTH (METERS)	1.0	4.0	0.3	1.0	4.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	28.0	28.0	28.0	28.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	73.	86.	68.	68.	68.	77.	80.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.3	7.7	7.2	7.5	7.8	7.6	7.8
PH (STD UNITS)	7.10	7.20	6.80	6.90	6.[illegible]	6.90	7.20

TABLE C-4g

PARAMETER NAME (UNITS)	STATION 05 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79	STATION 05 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	5.0	5.0	5.0	5.0	4.0	4.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	2.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCM R-BK LK UPST)	10.	50.	50.	50.	50.	90.	90.
SAMPLE DEPTH (METERS)	3.0	--	0.3	1.0	4.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.1	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	--	28.0	28.0	28.0	28.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	85.	--	75.	77.	80.	80.	80.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.8	--	8.0	7.9	7.5	7.6	7.7
PH (STD UNITS)	7.20	--	6.90	7.20	7.10	7.20	7.20

TABLE C-4h

PARAMETER NAME (UNITS)	STATION 05 7/18/79	STATION 06 7/18/79	STATION 06 7/18/79	STATION 06 7/18/79	STATION 06 7/18/79	STATION 06 7/18/79	STATION 06 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	6.0	6.0	6.0	6.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	--	--	0.00	--	--
CURRENT SPEED (FPS)	--	--	--	--	2.0	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCM R-BK LK UPST)	90.	10.	10.	10.	50.	50.	50.
SAMPLE DEPTH (METERS)	3.0	0.3	1.0	5.0	--	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.2	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	27.0	27.0	27.0	--	27.0	27.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	83.	77.	77.	82.	--	77.	77.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.7	8.5	8.0	8.0	--	8.0	7.9
PH (STD UNITS)	7.20	6.90	6.90	7.10	--	6.80	7.10

TABLE C-4i

PARAMETER NAME (UNITS)	STATION C6 7/18/79	STATION 06 7/18/79	STATIUN 06 7/.8/79	STATION 06 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	5.0	5.0	5.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCN R-BK LK UPST)	50.	90.	90.	90.	20.	20.	20.
SAMPLE DEPTH (METERS)	5.0	0.3	1.0	4.0	0.3	1.0	6.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD EASUREMENTS							
WATER TEMPERATURE (DEG C)	27.0	27.0	27.0	27.0	28.0	28.0	28.0
SPFC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	72.	77.	82.	80.	80.	85.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	360	360	360
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.9	7.9	7.8	7.9	7.2	7.2	7.3
PH (STD UNITS)	7.20	7.20	7.20	7.20	7.50	7.40	7.30

TABLE C-4j

PARAMETER NAME (UNITS)	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	7.0	7.0	8.0	8.0	8.0
WAVE HEIGHT (METERS)	0.00	--	--	--	--	--	--
CURRENT SPEED (FPS)	0.0	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	40.	40.	40.	40.	60.	60.	60.
SAMPLE DEPTH (METERS)	--	0.3	1.0	6.0	0.3	1.0	7.0
SECCHI DISK TRANSPARENCY (METERS)	0.7	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.5	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	28.0	28.0	28.0	28.0	28.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	80.	80.	83.	80.	80.	85.
OXIDATION REDUCTION POTENTIAL (MV)	--	290	350	360	410	410	400
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	7.6	7.4	7.4	8.0	8.1	7.4
PH (STD UNITS)	--	7.30	7.30	7.20	7.10	7.30	7.20

TABLE C-4k

PARAMETER NAME (UNITS)	STATION 07 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79	STATION 08 7/17/79	STATION 08 7/17/79	STATION 08 7/17/79	STATION 09 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	3.0	3.0	3.0	6.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	0.00
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	80.	80.	80.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	4.0	--	1.0	2.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.6	--	--	0.6
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.3	--	--	1.4
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	28.0	--	28.0	28.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	75.	75.	80.	--	88.	96.	--
OXIDATION REDUCTION POTENTIAL (MV)	420	370	360	--	410	400	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.0	7.8	7.3	--	6.3	6.0	--
PH (STD UNITS)	7.10	7.20	7.20	--	7.40	7.20	--

TABLE C-41

PARAMETER NAME (UNITS)	STATION 09 7/17/79	STATION 09 7/17/79	STATION 09 7/17/79	STATION 10 7/17/79	STATION 10 7/17/79	STATION 10 7/17/79	STATION 10 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	6.0	6.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	50.	50.	50.	40.	40.	40.	40.
SAMPLE DEPTH (METERS)	1.0	3.0	5.0	--	1.0	3.0	5.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.7	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.6	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	27.5	--	28.0	28.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	80.	80.	81.	--	80.	80.	80.
OXIDATION REDUCTION POTENTIAL (MV)	370	380	380	--	370	380	390
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.3	6.3	5.2	--	6.7	6.2	6.2
PH (STD UNITS)	7.60	7.30	7.20	--	8.20	7.50	7.30

TABLE C-4m

PARAMETER NAME (UNITS)	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	10.0	10.0	10.0	10.0
WAVE HEIGHT (MFTERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFRCM R-BK LK UPST)	20.	20.	20.	40.	40.	40.	40.
SAMPLE DEPTH (METERS)	1.0	3.0	4.0	1.0	3.0	5.0	7.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	29.0	28.5	29.0	28.5	28.5	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	92.	101.	140.	83.	104.	126.	122.
OXIDATION REDUCTION POTENTIAL (MV)	370	370	370	360	370	370	370
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.4	7.7	7.0	7.6	6.9	6.7	6.3
PH (STD UNITS)	8.50	8.40	8.20	7.40	7.80	7.90	7.80

TABLE C-4n

PARAMETER NAME (UNITS)	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	10.0	6.0	6.0	6.0	6.0	6.0	6.0
WAVE HEIGHT (METERS)	--	0.00	--	--	--	--	--
CURRENT SPEED (FPS)	--	0.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	40.	60.	60.	60.	60.	80.	80.
SAMPLE DEPTH (METERS)	9.0	--	1.0	3.0	5.0	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.9	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	3.0	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	--	29.0	28.0	28.0	28.5	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	127.	--	83.	127.	99.	102.	108.
OXIDATION REDUCTION POTENTIAL (MV)	370	--	400	390	380	400	390
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.3	--	7.1	6.7	4.2	7.3	6.6
PH (STD UNITS)	7.90	--	7.60	8.00	7.50	8.00	7.80

TABLE C-4o

PARAMETER NAME (UNITS)	STATION 11 7/17/79	STATION 12 7/18/79	STATION 12 7/18/79	STATION 12 7/18/79	STATION 12 7/18/79	STATION 12 7/18/79	STATION 12 7/18/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	2.0	2.0	1.5	1.5	1.5	2.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	80.	30.	30.	50.	50.	50.	80.
SAMPLE DEPTH (METERS)	5.0	0.3	1.0	--	0.3	1.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	1.5	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.5	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	31.0	30.0	--	31.0	30.0	31.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	132.	84.	86.	--	84.	86.	84.
OXIDATION REDUCTION POTENTIAL (MV)	400	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.4	7.8	8.2	--	7.7	8.3	8.0
PH (STD UNITS)	7.80	--	--	--	--	7.30	--

TABLE C-4p

PARAMETER NAME (UNITS)	STATION 12 7/18/79	STATION 13 7/16/79	STATION 13 7/16/79	STATION 13 7/16/79	STATION 13 7/16/79	STATION 13 7/16/79	STATION 13 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	2.0	9.0	9.0	9.0	9.0	9.0	9.0
WAVE HEIGHT (METERS)	--	0.00	--	--	--	--	--
CURRENT SPEED (FPS)	--	0.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	80.	30.	30.	30.	30.	30.	30.
SAMPLE DEPTH (METERS)	1.0	--	1.0	3.0	5.0	7.0	8.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.0	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	2.5	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	30.0	--	31.0	29.0	28.0	27.5	27.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	86.	--	136.	140.	143.	144.	146.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	340	330	340	360	360
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.8	--	9.2	8.0	6.3	5.2	5.2
PH (STD UNITS)	--	--	8.50	8.60	7.90	7.40	7.50

TABLE C-4q

PARAMETER NAME (UNITS)	STATION 14 7/16/79	STATION 14 7/16/79	STATION 14 7/16/79	STATION 14 7/16/79	STATION 14 7/16/79	STATION 14 7/16/79	STATION 14 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	2.5	2.5	1.5	1.5	1.5	3.0	3.0
WAVE HEIGHT (METERS)	--	--	0.00	--	--	--	--
CURRENT SPEED (FPS)	--	--	0.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	20.	20.	50.	50.	50.	[illegible]	80.
SAMPLE DEPTH (METERS)	0.3	1.5	--	0.3	1.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	1.2	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.5	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	31.0	28.0	--	31.0	29.0	30.0	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	180.	188.	--	176.	184.	180.	179.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.6	9.2	--	8.9	9.2	9.4	8.8
PH (STD UNITS)	--	--	--	--	8.00	--	--

TABLE C-4r

PARAMETER NAME (UNITS)	STATION 14 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	8.0	8.0	8.0	8.0	8.0	8.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	80.	20.	20.	20.	20.	40.	40.
SAMPLE DEPTH (METERS)	2.0	1.0	3.0	5.0	7.0	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	30.0	28.0	28.0	27.0	30.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	183.	135.	132.	136.	139.	131.	132.
OXIDATION REDUCTION POTENTIAL (MV)	--	360	360	370	360	370	360
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.2	13.2	7.0	7.3	6.7	12.1	9.1
PH (STD UNITS)	--	8.80	7.70	7.50	7.40	8.80	8.10

TABLE C-4s

PARAMETER NAME (UNITS)	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	8.0	8.0	4.0	4.0	4.0	4.0	8.0
WAVE HEIGHT (METERS)	--	--	0.02	--	--	--	--
CURRENT SPEED (FPS)	--	--	0.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	40.	40.	60.	60.	60.	60.	80.
SAMPLE DEPTH (METERS)	5.0	7.0	--	1.0	2.0	3.0	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	1.0	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	3.0	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	--	30.0	28.5	28.5	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	132.	127.	--	126.	130.	126.	124.
OXIDATION REDUCTION POTENTIAL (MV)	350	360	--	360	350	330	330
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.8	6.5	--	12.3	9.6	8.8	10.9
PH (STD UNITS)	7.80	7.50	--	8.70	8.80	8.30	8.60

TABLE C-4t

PARAMETER NAME (UNITS)	STATION 15 7/16/79	STATION 15 7/16/79	STATION 15 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	8.0	8.0	8.0	4.0	4.0	4.0	6.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	0.00
CURRENT SPEED (FPS)	--	--	--	--	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	80.	80.	80.	5.	5.	5.	50.
SAMPLE DEPTH (METERS)	3.0	5.0	7.0	0.3	1.0	3.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	1.1
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	2.9
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	28.0	28.0	27.5	27.5	27.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	124.	127.	127.	114.	114.	117.	--
OXIDATION REDUCTION POTENTIAL (MV)	330	340	340	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.8	7.2	6.6	6.8	6.8	6.8	--
PH (STD UNITS)	8.10	7.70	7.50	7.70	7.60	7.40	--

TABLE C-4u

PARAMETER NAME (UNITS)	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 16 7/16/79	STATION 17 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	6.0	4.0	4.0	4.0	5.0
WAVE HEIGHT (METERS)	--	--	--	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	80.	80.	80.	5.
SAMPLE DEPTH (METERS)	0.3	1.0	5.0	0.3	1.0	3.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	28.0	27.0	29.5	28.0	27.5	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	115.	113.	115.	116.	115.	116.	105.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.0	6.9	6.5	7.9	7.2	6.8	6.8
PH (STD UNITS)	7.70	7.60	7.40	7.30	6.90	7.10	7.30

TABLE C-4v

PARAMETER NAME (UNITS)	STATION 17 7/16/79	STATION 17 7/16/79	STATION 17 7/16/79	STATION 17 7/16/79	STATION 17 7/16/79	STATION 17 7/16/79	STATION 17 7/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	7.0	7.0	7.0	7.0	1.5
WAVE HEIGHT (METERS)	--	--	0.00	--	--	--	--
CURRENT SPEED (FPS)	--	--	0.5	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	5.	5.	50.	50.	50.	50.	95.
SAMPLE DEPTH (METERS)	1.0	4.0	--	0.3	1.0	6.0	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	1.1	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	2.5	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	27.0	27.0	--	27.0	27.0	27.0	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	106.	110.	--	101.	101.	108.	105.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	470	370	270	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.6	6.5	--	6.7	6.8	6.8	6.7
PH (STD UNITS)	7.20	7.20	--	7.20	7.40	6.80	7.20

TABLE C-4w

PARAMETER NAME (UNITS)	STATION 17 7/16/79	STATION 18 7/17/79	STATION 18 7/17/79	STATION 18 7/17/79	STATION 18 7/17/79	STATION 18 7/17/79	STATION 18 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	1.5	2.0	2.0	4.0	4.0	4.0	4.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	--
CURRENT SPEED (FPS)	--	--	--	2.5	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	95.	10.	10.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	0.3	1.0	--	0.3	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.9	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	2.5	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	27.0	28.5	28.5	--	28.5	28.5	28.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	106.	113.	116.	--	113.	113.	118.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.6	6.7	6.6	--	6.6	6.6	6.6
PH (STD UNITS)	7.10	7.10	7.50	--	7.40	7.50	7.50

TABLE C-4x

PARAMETER NAME (UNITS)	STATION 18 7/17/79	STATION 18 7/17/79	STATION 18 7/17/79	STATION 19 7/17/79	STATION 19 7/17/79	STATION 19 7/17/79	STATION 19 7/17/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.5	4.5	4.5	1.5	1.5	3.0	3.0
WAVE HEIGHT (METERS)	--	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	--	--	--	--	--	2.5	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	90.	90.	90.	10.	10.	50.	50.
SAMPLE DEPTH (METERS)	0.3	1.0	3.5	0.3	1.0	--	0.3
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	--	0.9	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	--	2.5	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.5	28.5	28.5	28.5	29.0	--	28.5
SPFC CONDUCTANCE, FLD (UMHO/CM 25C)	116.	119.	121.	113.	115.	--	112.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.4	6.5	6.6	5.5	5.4	--	6.1
PH (STD UNITS)	7.70	7.60	7.60	7.20	7.40	--	7.30

TABLE C-4y

PARAMETER NAME (UNITS)	STATION 19 7/17/79	STATION 19 7/17/79	STATION 19 7/17/79	STATION 19 7/17/79
HYDROLOGICAL DATA				
TOTAL DEPTH (METERS)	3.0	3.0	2.0	2.0
WAVE HEIGHT (METERS)	--	--	--	--
CURRENT SPEED (FPS)	--	--	--	--
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	90.	90.
SAMPLE DEPTH (METERS)	1.0	2.0	0.3	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.5	28.5	29.0	29.0
SPFC CONDUCTANCE, FLD (UMHO/CM 25C)	112.	116.	112.	112.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.6	6.6	6.2	6.2
PH (STD UNITS)	7.30	7.50	7.40	7.40

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 3/8

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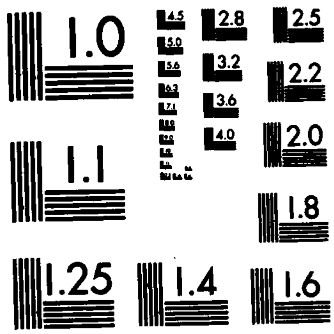

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE C-5a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE III CYCLE 5 (8/13-16/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 01 8/15/79	STATION 02 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	3.0	3.0	5.0	5.0	3.0
WAVE HEIGHT (METERS)	0.00	--	0.00	--	0.00	--	0.00
CURRENT SPEED (FPS)	0.5	--	0.5	--	0.5	--	0.5
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	1.3	--	1.2	--	1.2	--	1.2
DEPTH OF 1% SURFACE LIGHT (METERS)	3.0	--	3.0	--	3.0	--	3.0
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	28.0	--	28.0	--	28.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	61.	--	73.	--	74.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	7.8	--	7.8	--	7.8	--
PH (STD UNITS)	--	7.00	--	7.30	--	7.30	--

TABLE C-5b

PARAMETER NAME (UNITS)	STATION 04 8/15/79	STATION 03 8/15/79	STATION 05 8/15/79	STATION 06 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79	STATION 07 8/14/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	5.0	5.0	5.0	5.0	6.0	6.0
WAVE HEIGHT (METERS)	--	0.00	--	0.00	--	0.00	--
CURRENT SPEED (FPS)	--	2.0	--	1.0	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.0	--	1.0	--	1.1	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.8	--	2.0	--	2.1	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	29.0	--	28.0	--	28.0	--	29.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	64.	--	89.	--	84.	--	96.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	480
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.8	--	6.4	--	7.0	--	7.6
PH (STD UNITS)	8.10	--	8.00	--	7.00	--	7.40

TABLE C-5c

PARAMETER NAME (UNITS)	STATION 07 8/14/79	STATION 07 8/14/79	STATION 08 8/14/79	STATION 08 8/14/79	STATION 08 8/14/79	STATION 09 8/14/79	STATION 09 8/14/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	6.0	6.0	3.0	3.0	3.0	4.5	4.5
WAVE HEIGHT (METERS)	--	--	0.00	--	--	0.30	--
CURRENT SPEED (FPS)	--	--	0.7	--	--	1.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	3.0	5.0	--	1.0	2.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.8	--	--	0.7	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.4	--	--	1.4	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	27.5	--	28.0	28.0	--	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	100.	103.	--	96.	95.	--	86.
OXIDATION REDUCTION POTENTIAL (MV)	480	500	--	500	500	--	470
DISSOLVED OXYGEN, ELECTRODE (MG/L)	5.6	5.3	--	6.2	5.5	--	6.0
PH (STD UNITS)	7.20	7.50	--	7.30	7.20	--	7.50

TABLE C-5d

PARAMETER NAME (UNITS)	STATION 09 8/14/79	STATION 09 8/14/79	STATION 10 8/14/79	STATION 10 8/14/79	STATION 10 8/14/79	STATION 10 8/14/79	STATION 10 8/14/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.5	4.5	7.0	7.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	--	--	0.05	--	--	--	--
CURRENT SPEED (FPS)	--	--	0.0	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	2.0	3.5	--	1.0	3.0	5.0	6.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.7	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	1.5	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	28.0	28.0	--	29.0	28.0	28.0	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	87.	88.	--	85.	88.	89.	91.
OXIDATION REDUCTION POTENTIAL (MV)	490	480	--	500	490	470	490
DISSOLVED OXYGEN, ELECTRODE (MG/L)	4.9	4.5	--	7.0	4.9	4.8	4.5
PH (STD UNITS)	7.10	7.30	--	7.70	7.20	7.20	7.20

TABLE C-5e

PARAMETER NAME (UNITS)	STATION 11 8/14/79	STATION 11 8/14/79	STATION 11 8/14/79	STATION 11 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79	STATION 12 8/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	5.0	1.0	1.0
WAVE HEIGHT (METERS)	0.20	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	0.0	--	--	--	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	60.	60.	60.	60.	60.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	2.0	3.0	4.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.9	--	--	--	--	1.0	--
DEPTH OF 1% SURFACE LIGHT (METERS)	2.1	--	--	--	--	1.0	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	29.5	29.0	29.0	28.5	--	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	91.	92.	94.	95.	--	93.
OXIDATION REDUCTION POTENTIAL (MV)	--	410	410	440	450	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	8.3	7.5	5.9	5.3	--	7.5
PH (STD UNITS)	--	8.05	8.10	7.50	7.40	--	7.90

TABLE C-5f

PARAMETER NAME (UNITS)	STATION 13 8/13/79	STATION 13 8/13/79	STATION 13 8/13/79	STATION 13 8/13/79	STATION 13 8/13/79	STATION 14 8/16/79	STATION 14 8/16/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	5.0	2.0	2.0
WAVE HEIGHT (METERS)	0.10	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	0.0	--	--	--	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFRCM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	2.0	3.0	4.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.8	--	--	--	--	1.2	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.8	--	--	--	--	2.0	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	29.5	29.0	28.5	28.5	--	27.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	137.	138.	140.	140.	--	206.
OXIDATION REDUCTION POTENTIAL (MV)	--	360	370	380	390	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	8.5	6.8	6.0	5.8	--	8.3
PH (STD UNITS)	--	8.80	8.70	8.40	8.10	--	8.10

TABLE C-5g

PARAMETER NAME (UNITS)	STATION 15 8/13/79	STATION 15 8/13/79	STATION 15 8/13/79	STATION 15 8/13/79	STATION 15 8/13/79	STATION 16 8/13/79	STATION 16 8/13/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	0.10	--	--	--	--	0.00	--
CURRENT SPEED (FPS)	0.0	--	--	--	--	0.5	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	40.	40.	40.	40.	40.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	2.0	3.0	4.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.9	--	--	--	--	1.3	--
DEPTH OF 1% SURFACE LIGHT (METERS)	2.0	--	--	--	--	4.0	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	30.0	29.0	29.0	28.0	--	28.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	140.	140.	140.	147.	--	146.
OXIDATION REDUCTION POTENTIAL (MV)	--	350	340	350	390	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	10.4	9.0	7.7	6.1	--	7.2
PH (STD UNITS)	--	8.90	8.50	8.20	8.10	--	8.15

TABLE C-5h

PARAMETER NAME (UNITS)	STATION 17 8/13/79	STATION 17 8/13/79	STATION 18 8/14/79	STATION 18 8/14/79	STATION 19 8/14/79	STATION 19 8/14/79
HYDROLOGICAL DATA						
TOTAL DEPTH (METERS)	7.0	7.0	4.0	4.0	3.5	3.5
WAVE HEIGHT (METERS)	0.00	--	0.00	--	0.00	--
CURRENT SPEED (FPS)	0.5	--	3.5	--	3.5	--
PHYSICAL DATA						
MISCELLANEOUS DATA						
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	2.3	--	0.9	--	0.8	--
DEPTH OF 1% SURFACE LIGHT (METERS)	7.0	--	1.9	--	2.3	--
FIELD MEASUREMENTS						
WATER TEMPERATURE (DEG C)	--	27.0	--	28.5	--	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	144.	--	102.	--	101.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	6.3	--	6.7	--	5.7
PH (STD UNITS)	--	7.60	--	7.60	--	7.50

TABLE C-6a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 9/26/79	STATION 01 9/26/79	STATION 02 9/26/79	STATION 02 9/26/79	STATION 03 9/26/79	STATION 03 9/26/79	STATION 04 9/26/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	4.0	4.0	6.0	6.0	3.0
WAVE HEIGHT (METERS)	0.00	--	0.00	--	0.00	--	0.00
CURRENT SPEED (FPS)	1.0	--	1.0	--	1.0	--	1.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FRCM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	1.3	--	1.0	--	1.0	--	1.1
DEPTH OF 1% SURFACE LIGHT (METERS)	3.2	--	2.5	--	2.5	--	2.5
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	23.5	--	23.5	--	23.5	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	64.	--	64.	--	66.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	8.2	--	8.0	--	8.0	--
PH (STD UNITS)	--	7.10	--	7.10	--	7.00	--

TABLE C-6b

PARAMETER NAME (UNITS)	STATION 04 9/26/79	STATION 05 9/26/79	STATION 05 9/26/79	STATION 06 9/26/79	STATION 06 9/26/79	STATION 07 9/25/79	STATION 07 9/25/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	5.0	5.0	5.0	5.0	8.0	8.0
WAVE HEIGHT (METERS)	--	0.00	--	0.00	--	0.05	--
CURRENT SPEED (FPS)	--	1.0	--	1.0	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.0	--	1.0	--	0.9	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	2.1	--	1.8	--	1.8	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	23.5	--	23.5	--	23.0	--	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	72.	--	88.	--	78.	--	95.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	340
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.1	--	7.6	--	7.5	--	6.2
PH (STD UNITS)	7.00	--	7.00	--	7.00	--	6.95

TABLE C-6c

PARAMETER NAME (UNITS)	STATION 07 9/25/79	STATION 07 9/25/79	STATION 07 9/25/79	STATION 08 9/25/79	STATION 08 9/25/79	STATION 08 9/25/79	STATION 09 9/25/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	8.0	8.0	8.0	2.5	2.5	2.5	5.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	0.10
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	3.0	5.0	7.0	--	1.0	1.5	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.9	--	--	0.5
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.9	--	--	1.0
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	24.5	24.5	24.5		[illegible]4.0	24.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	97.	99.	101.	--	92.	92.	--
OXIDATION REDUCTION POTENTIAL (MV)	410	390	420	--	430	430	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.1	6.1	6.2	--	6.8	6.8	--
PH (STD UNITS)	6.80	6.90	7.00	--	7.00	7.00	--

TABLE C-6d

PARAMETER NAME (UNITS)	STATION 09 9/25/79	STATION 09 9/25/79	STATION 09 9/25/79	STATION 10 9/25/79	STATION 10 9/25/79	STATION 10 9/25/79	STATION 10 9/25/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	7.0	7.0	7.0	7.0
WAVE HEIGHT (METERS)	--	--	--	0.05	--	--	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	3.0	4.0	--	1.0	3.0	5.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.4	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	0.9	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	23.5	24.0	24.0	--	23.0	24.0	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	88.	87.	87.	--	85.	87.	87.
OXIDATION REDUCTION POTENTIAL (MV)	580	570	570	--	490	470	470
DISSOLVED OXYGEN, ELECTRODE (MG/L)	5.9	5.8	5.8	--	6.0	5.9	5.8
PH (STD UNITS)	6.85	6.80	6.80	--	6.95	6.80	6.70

TABLE C-6e

PARAMETER NAME (UNITS)	STATION 10 9/25/79	STATION 11 9/25/79	STATION 11 9/25/79	STATION 11 9/25/79	STATION 11 9/25/79	STATION 11 9/25/79	STATION 12 9/24/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	6.0	6.0	6.0	6.0	6.0	1.5
WAVE HEIGHT (METERS)	--	0.30	--	--	--	--	0.10
CURRENT SPEED (FPS)	--	0.0	--	--	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	75.	75.	75.	75.	75.	50.
SAMPLE DEPTH (METERS)	6.0	--	0.3	1.0	3.0	5.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	0.5	--	--	--	--	1.5
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.0	--	--	--	--	1.5
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	24.0	--	23.5	23.5	23.5	23.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	90.	--	93.	93.	93.	94.	--
OXIDATION REDUCTION POTENTIAL (MV)	480	--	450	450	450	440	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	5.8	--	6.8	6.8	6.8	6.8	--
PH (STD UNITS)	6.80	--	7.10	7.10	7.15	7.10	--

TABLE C-6f

PARAMETER NAME (UNITS)	STATION 12 9/24/79	STATION 13 9/24/79	STATION 13 9/24/79	STATION 13 9/24/79	STATION 13 9/24/79	STATION 13 9/24/79	STATION 13 9/24/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	1.5	9.0	9.0	9.0	9.0	9.0	9.0
WAVE HEIGHT (METERS)	--	0.30	--	--	--	--	--
CURRENT SPEED (FPS)	--	0.0	--	--	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (XFROM R-BK LK UPST)	50.	30.	30.	30.	30.	30.	30.
SAMPLE DEPTH (METERS)	1.0	--	0.3	1.0	3.0	5.0	7.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.8	--	--	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	1.6	--	--	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	23.5	--	25.0	25.0	25.0	25.0	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	95.	--	150.	150.	152.	152.	155.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	450	--	450	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.7	--	7.1	7.1	7.1	7.1	7.1
PH (STD UNITS)	7.35	--	--	7.70	--	7.60	--

TABLE C-6g

PARAMETER NAME (UNITS)	STATION 13 9/24/79	STATION 14 9/24/79	STATION 14 9/24/79	STATION 15 9/24/79	STATION 15 9/24/79	STATION 15 9/24/79	STATION 15 9/24/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	9.0	4.0	4.0	5.0	5.0	5.0	5.0
WAVE HEIGHT (METERS)	--	0.05	--	0.30	--	--	--
CURRENT SPEED (FPS)	--	0.0	--	0.0	--	--	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	30.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	0.0	--	1.0	--	0.3	1.0	3.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.3	--	0.9	--	--	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	3.1	--	2.1	--	--	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	25.0	--	23.0	--	24.0	24.0	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	155.	--	208.	--	153.	153.	154.
OXIDATION REDUCTION POTENTIAL (MV)	480	--	--	--	430	430	450
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.0	--	7.6	--	7.4	7.3	7.4
PH (STD UNITS)	7.60	--	7.70	--	7.60	7.70	7.60

TABLE C-6h

PARAMETER NAME (UNITS)	STATION 15 9/24/79	STATION 16 9/24/79	STATION 16 9/24/79	STATION 17 9/24/79	STATION 17 9/24/79	STATION 18 9/25/79	STATION 18 9/25/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	6.0	6.0	6.0	6.0	4.0	4.0
WAVE HEIGHT (METERS)	--	0.01	--	0.00	--	0.00	--
CURRENT SPEED (FPS)	--	0.0	--	1.0	--	3.5	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	4.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	1.3	--	1.9	--	0.7	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	2.8	--	3.6	--	1.3	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	24.0	--	24.0	--	24.0	--	23.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	156.	--	131.	--	120.	--	122.
OXIDATION REDUCTION POTENTIAL (MV)	500	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.4	--	6.8	--	6.9	--	6.6
PH (STD UNITS)	7.70	--	7.60	--	7.35	--	7.30

TABLE C-61

PARAMETER NAME (UNITS)	STATION 19 9/25/79	STATION 19 9/25/79
HYDROLOGICAL DATA		
TOTAL DEPTH (METERS)	3.0	3.0
WAVE HEIGHT (METERS)	0.00	--
CURRENT SPEED (FPS)	3.5	--
PHYSICAL DATA		
MISCELLANEOUS DATA		
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.
SAMPLE DEPTH (METERS)	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.8	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.3	--
FIELD MEASUREMENTS		
WATER TEMPERATURE (DEG C)	--	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	122.
OXIDATION REDUCTION POTENTIAL (MV)	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	6.0
PH (STD UNITS)	--	7.20

TABLE C-7a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-8/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 12/ 5/79	STATION 01 12/ 5/79	STATION 02 12/ 5/79	STATION 02 12/ 5/79	STATION 03 12/ 5/79	STATION 03 12/ 5/79	STATION 04 12/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	5.0	7.0	7.0	5.0
WAVE HEIGHT (METERS)	0.00	--	0.00	--	0.00	--	0.00
CURRENT SPEED (FPS)	3.0	--	3.0	--	3.0	--	3.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	0.8	--	0.9	--	0.9	--	0.9
DEPTH OF 1% SURFACE LIGHT (METERS)	2.0	--	2.1	--	2.3	--	2.2
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	--	11.5	--	12.0	--	12.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	70.	--	69.	--	69.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	10.9	--	10.7	--	10.6	--
PH (STD UNITS)	--	7.20	--	7.10	--	7.35	--

TABLE C-7b

PARAMETER NAME (UNITS)	STATION 04 12/ 5/79	STATION 05 12/ 5/79	STATION 05 12/ 5/79	STATION 06 12/ 6/79	STATION 06 12/ 6/79	STATION 07 12/ 6/79	STATION 07 12/ 6/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	4.0	4.0	8.0	8.0	3.0	3.0
WAVE HEIGHT (METERS)	--	0.00	--	0.00	--	0.00	--
CURRENT SPEED (FPS)	--	3.0	--	2.0	--	1.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	--	1.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	0.9	--	0.9	--	0.8	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	2.0	--	2.5	--	2.2	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.0	--	12.0	--	12.0	--	13.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	74.	--	66.	--	76.	--	74.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--	--	--	440
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.5	--	10.2	--	10.7	--	10.2
PH (STD UNITS)	7.30	--	7.25	--	7.15	--	7.30

TABLE C-7c

PARAMETER NAME (UNITS)	STATION 07 12/ 6/79	STATION 07 12/ 6/79	STATION 08 12/ 6/79	STATION 08 12/ 6/79	STATION 08 12/ 6/79	STATION 09 12/ 6/79	STATION 09 12/ 6/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	3.0	3.0	3.0	3.0	3.0	5.0	5.0
WAVE HEIGHT (METERS)	--	--	0.00	--	--	0.00	--
CURRENT SPEED (FPS)	--	--	1.0	--	--	0.0	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	2.0	3.0	--	1.0	2.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	0.8	--	--	0.7	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	2.0	--	--	1.6	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	13.0	13.0	--	12.5	12.5	--	12.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	74.	74.	--	81.	78.	--	79.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	460	--	--	410
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.2	10.4	--	10.2	10.4	--	10.3
PH (STD UNITS)	--	--	--	7.40	--	--	7.00

TABLE C-7d

PARAMETER NAME (UNITS)	STATION 09 12/ 6/79	STATION 09 12/ 6/79	STATION 09 12/ 6/79	STATION 10 12/ 6/79	STATION 10 12/ 6/79	STATION 10 12/ 6/79	STATION 11 12/ 5/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	5.0	5.0	5.0	2.5	2.5	2.5	7.0
WAVE HEIGHT (METERS)	--	--	--	0.00	--	--	0.00
CURRENT SPEED (FPS)	--	--	--	0.0	--	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	2.0	3.0	4.0	--	1.0	2.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	0.8	--	--	0.8
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	1.8	--	--	1.9
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.5	12.0	12.0	--	12.5	12.5	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	79.	79.	--	78.	81.	--
OXIDATION REDUCTION POTENTIAL (MV)	420	440	440	--	490	480	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.4	10.2	9.9	--	10.0	10.2	--
PH (STD UNITS)	7.00	7.10	7.10	--	7.00	7.15	--

TABLE C-7e

PARAMETER NAME (UNITS)	STATION 11 12/ 5/79	STATION 11 12/ 5/79	STATION 11 12/ 5/79	STATION 11 12/ 5/79	STATION 12 12/ 6/79	STATION 12 12/ 6/79	STATION 13 12/ 6/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	7.0	7.0	1.0	1.0	7.0
WAVE HEIGHT (METERS)	--	--	--	--	0.00	--	25.00
CURRENT SPEED (FPS)	--	--	--	--	0.0	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	80.	80.	80.	80.	50.	50.	30.
SAMPLE DEPTH (METERS)	1.0	3.0	5.0	6.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	1.0	--	1.1
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.0	--	3.0
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.0	11.0	11.0	11.0	--	11.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	66.	67.	67.	67.	--	102.	--
OXIDATION REDUCTION POTENTIAL (MV)	530	520	520	510	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.2	10.0	10.0	9.9	--	10.2	--
PH (STD UNITS)	7.45	7.30	7.15	7.10	--	7.10	--

TABLE C-7f

PARAMETER NAME (UNITS)	STATION 13 12/ 6/79	STATION 13 12/ 6/79	STATION 13 12/ 6/79	STATION 13 12/ 6/79	STATION 14 12/ 3/79	STATION 14 12/ 3/79	STATION 15 12/ 3/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	7.0	7.0	7.0	7.0	1.9	1.9	4.0
WAVE HEIGHT (METERS)	--	--	--	--	0.10	--	0.20
CURRENT SPEED (FPS)	--	--	--	--	0.0	--	0.0
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	30.	30.	30.	30.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	3.0	5.0	6.0	--	1.0	--
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	--	1.5	--	1.1
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	--	1.9	--	2.9
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.5	12.5	12.5	12.5	--	11.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	131.	138.	140.	141.	--	198.	--
OXIDATION REDUCTION POTENTIAL (MV)	580	510	520	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.6	9.3	9.3	9.2	--	10.2	--
PH (STD UNITS)	7.30	7.25	7.40	--	--	7.50	--

TABLE C-7g

PARAMETER NAME (UNITS)	STATION 15 12/ 3/79	STATION 15 12/ 3/79	STATION 15 12/ 3/79	STATION 16 12/ 3/79	STATION 16 12/ 3/79	STATION 17 12/ 3/79	STATION 17 12/ 3/79
HYDROLOGICAL DATA							
TOTAL DEPTH (METERS)	4.0	4.0	4.0	5.0	5.0	6.0	6.0
WAVE HEIGHT (METERS)	--	--	--	0.10	--	0.00	--
CURRENT SPEED (FPS)	--	--	--	0.0	--	0.6	--
PHYSICAL DATA							
MISCELLANEOUS DATA							
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	2.0	3.0	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	--	--	--	1.4	--	1.7	--
DEPTH OF 1% SURFACE LIGHT (METERS)	--	--	--	2.1	--	3.1	--
FIELD MEASUREMENTS							
WATER TEMPERATURE (DEG C)	12.5	12.5	12.5	--	12.0	--	12.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	98.	100.	100.	--	97.	--	96.
OXIDATION REDUCTION POTENTIAL (MV)	590	600	590	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.6	8.6	8.5	--	9.0	--	9.3
PH (STD UNITS)	7.10	7.05	7.10	--	6.90	--	6.80

TABLE C-7h

PARAMETER NAME (UNITS)	STATION 18 12/ 4/79	STATION 18 12/ 4/79	STATION 19 12/ 4/79	STATION 19 12/ 4/79
HYDROLOGICAL DATA				
TOTAL DEPTH (METERS)	5.5	5.5	5.0	5.0
WAVE HEIGHT (METERS)	0.00	--	0.00	--
CURRENT SPEED (FPS)	2.5	--	2.0	--
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	--	1.0	--	1.0
SECCHI DISK TRANSPARENCY (METERS)	0.8	--	0.9	--
DEPTH OF 1% SURFACE LIGHT (METERS)	1.9	--	2.0	--
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	--	11.5	--	11.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	--	108.	--	102.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	--	9.8	--	9.5
PH (STD UNITS)	--	7.00	--	7.00

APPENDIX D

WATER QUALITY SAMPLING RESULTS

LIST OF FIGURES

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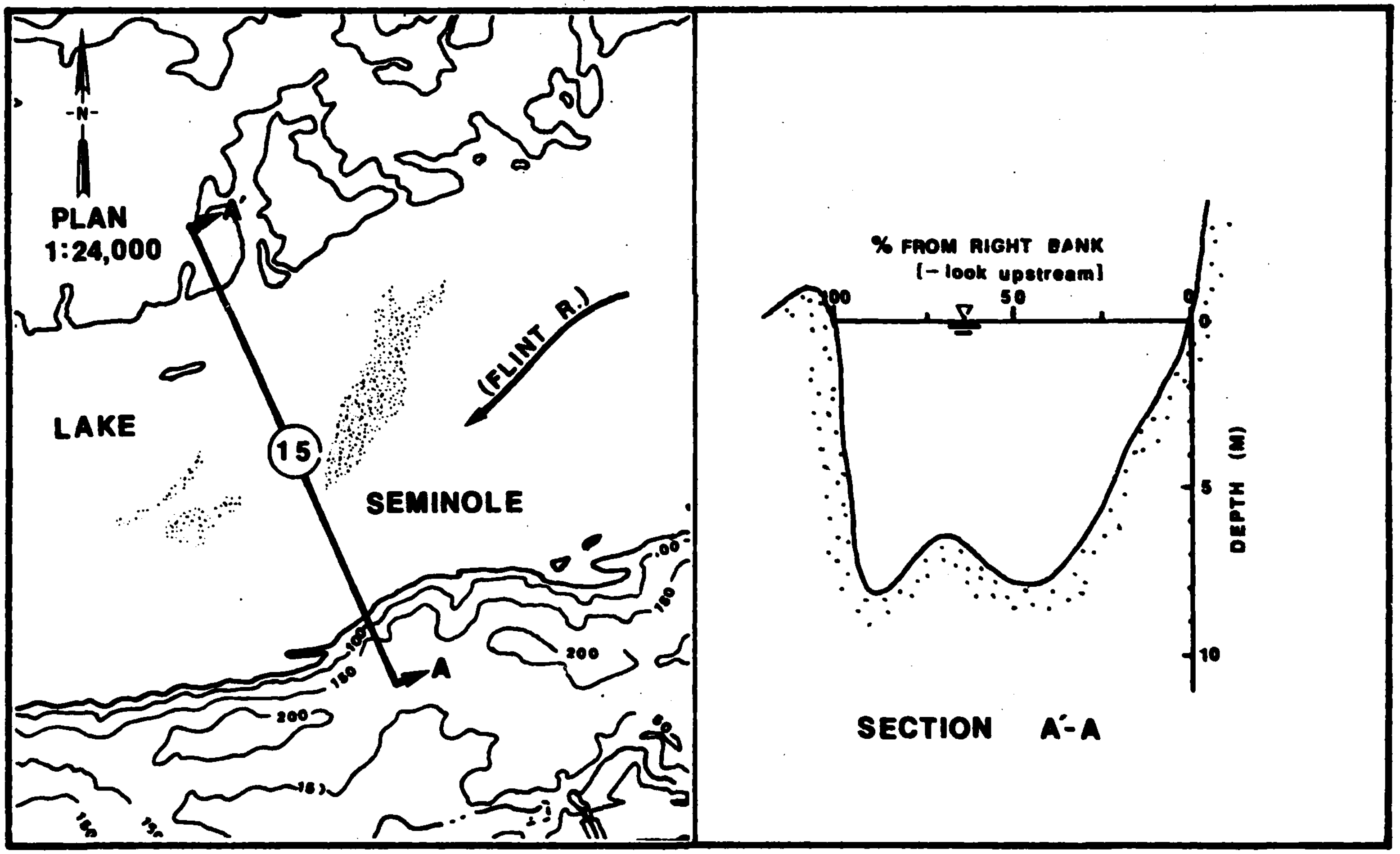


FIGURE D-1. TYPICAL PLAN AND CROSS SECTION OF A LAKE SEMINOLE SAMPLING STATION.

TABLE D-1a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

WATER QUALITY SAMPLING RESULTS

Grab Samples

PARAMETER NAME (UNITS)	STATION 01 2/21/79	STATION 02 2/21/79	STATION 03 2/21/79	STATION 04 2/21/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	7.5	7.5	8.0	8.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	61.	61.	62.	67.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.8	12.9	13.0	12.9
PH (STD UNITS)	7.10	7.10	7.10	7.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	60.	60.	70.
TURBIDITY, HACH TURBIDIMETER (FTU)	8.60	9.10	9.10	9.00
TOTAL FILTERABLE RESIDUE (MG/L)	53.	53.	60.	81.
TOTAL NONFILTERABLE RESIDUE (MG/L)	12.	14.	25.	21.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	11.	12.	12.	14.
CHLORIDE (MG CL/L)	5.	4.	5.	5.
SULFATE, TOTAL (MG SO4/L)	7.	7.	7.	9.
CALCIUM, TOTAL (MG CA/L)	4.5	4.3	4.8	4.9
HARDNESS, TOTAL (MG CACO3/L)	19.5	19.3	20.5	21.0
IRON, DISSOLVED (UG FE/L)	190	200	180	170
IRON, TOTAL (UG FE/L)	980	1370	1340	1480
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.4	1.4	1.4
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	50	60	60	80
POTASSIUM, TOTAL (MG K/L)	2.3	2.5	2.3	2.6
SODIUM, TOTAL (MG NA/L)	4.90	5.00	5.90	7.70
ZINC, TOTAL (UG ZN/L)	30	20	20	40
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	5.	4.	7.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	5.	8.
CARBON DIOXIDE (MG CO2/L)	2.3	2.5	2.5	2.9
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	<0.02	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.49	0.47	0.49	0.45
NITROGEN, TOTAL INORGANIC (MG N/L)	0.51	<0.49	<0.51	<0.47
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.4	0.5	0.5	0.6
NITROGEN, TOTAL ORGANIC (MG N/L)	0.4	< 0.5	< 0.5	< 0.6
NITROGEN, TOTAL (MG N/L)	0.9	1.0	1.0	1.0
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.05	0.04	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	2.23	2.17	2.59	2.30
FECAL STREPTOCOCCI (LOG10(/100ML))	2.88	3.25	4.13	3.63
FC/FS RATIO	0.22	0.08	0.03	0.05

TABLE D-1b

PARAMETER NAME (UNITS)	STATION 05 2/21/79	STATION 06 2/21/79	STATION 07 2/20/79	STATION 08 2/20/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	--
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	8.0	8.0	10.0	10.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	80.	80.	91.	88.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	410	410
DISSOLVED OXYGEN, ELECTRODE (MG/L)	12.5	12.2	10.6	10.4
PH (STD UNITS)	7.10	7.20	7.40	7.50
LABORATORY DATA				
COLOR (PT-CO UNITS)	85.	70.	70.	70.
TURBIDITY, HACH TURBIDIMETER (FTU)	8.10	9.60	4.60	4.60
TOTAL FILTERABLE RESIDUE (MG/L)	70.	91.	78.	71.
TOTAL NONFILTERABLE RESIDUE (MG/L)	17.	25.	13.	8.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	19.	15.	33.	30.
CHLORIDE (MG CL/L)	4.	5.	7.	6.
SULFATE, TOTAL (MG SO4/L)	12.	11.	9.	12.
CALCIUM, TOTAL (MG CA/L)	5.7	5.0	7.4	7.1
HARDNESS, TOTAL (MG CACO3/L)	22.3	21.1	25.8	25.0
IRON, DISSOLVED (UG FE/L)	150	150	200	210
IRON, TOTAL (UG FE/L)	1300	1390	830	860
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.4	1.3	1.3
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	80	< 90
MANGANESE, TOTAL (UG MN/L)	70	80	70	90
POTASSIUM, TOTAL (MG K/L)	2.6	2.3	1.1	1.8
SODIUM, TOTAL (MG NA/L)	8.80	8.30	5.20	7.50
ZINC, TOTAL (UG ZN/L)	30	20	20	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	7.	3.	5.
CARBON, TOTAL ORGANIC (MG C/L)	8.	8.	5.	6.
CARBON DIOXIDE (MG CO2/L)	4.0	2.5	3.3	2.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.10	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.47	0.47	0.50	0.49
NITROGEN, TOTAL INORGANIC (MG N/L)	0.50	0.57	<0.52	<0.51
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.6	0.5	0.6
NITROGEN, TOTAL ORGANIC (MG N/L)	0.6	0.5	< 0.5	< 0.6
NITROGEN, TOTAL (MG N/L)	1.1	1.0	1.0	1.1
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	<0.01	0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.05	0.07	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	2.48	2.36	1.89	1.86
FECAL STREPTOCOCCI (LOG10(/100ML))	2.78	3.25	< 0.0	1.92
FC/FS RATIO	0.51	0.13	--	0.87

TABLE D-1c

PARAMETER NAME (UNITS)	STATION 09 2/20/79	STATION 10 2/20/79	STATION 11 2/20/79	STATION 12 2/22/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	40.	60.	70.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	9.0	9.0	9.0	12.8
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	79.	79.	93.
OXIDATION REDUCTION POTENTIAL (MV)	430	420	440	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	11.0	10.9	11.3	9.9
PH (STD UNITS)	7.60	7.40	7.50	7.70
LABORATORY DATA				
COLOR (PT-CO UNITS)	65.	60.	65.	25.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.10	6.60	7.10	2.10
TOTAL FILTERABLE RESIDUE (MG/L)	63.	64.	61.	90.
TOTAL NONFILTERABLE RESIDUE (MG/L)	13.	15.	13.	4.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	23.	24.	27.	40.
CHLORIDE (MG CL/L)	3.	6.	4.	4.
SULFATE, TOTAL (MG SO4/L)	9.	10.	2.	2.
CALCIUM, TOTAL (MG CA/L)	5.0	4.6	6.2	11.5
HARDNESS, TOTAL (MG CACO3/L)	20.3	18.8	22.2	33.9
IRON, DISSOLVED (UG FE/L)	210	210	230	80
IRON, TOTAL (UG FE/L)	960	1160	1050	410
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.4	1.2	1.1
MANGANESE, DISSOLVED (UG MN/L)	70	70	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	90	50	< 50
POTASSIUM, TOTAL (MG K/L)	2.2	2.2	1.6	1.3
SODIUM, TOTAL (MG NA/L)	7.50	7.10	5.30	3.70
ZINC, TOTAL (UG ZN/L)	20	30	20	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	3.	3.	3.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	6.	6.	6.
CARBON DIOXIDE (MG CO2/L)	1.5	2.5	2.2	1.9
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	<0.02	<0.02	0.'4
NITROGEN, NITRATE+NITRITE (MG N/L)	0.45	0.45	0.36	0.08
NITROGEN, TOTAL INORGANIC (MG N/L)	<0.47	<0.47	<0.40	0.12
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.6	0.5	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	< 0.5	< 0.6	< 0.5	0.3
NITROGEN, TOTAL (MG N/L)	1.0	1.0	0.8	0.4
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.02	0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.04	0.05	0.02
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.28	0.95	1.18	0.70
FECAL STREPTOCOCCI (LOG10(/100ML))	1.41	1.23	0.85	1.00
FC/FS RATIO	0.73	0.53	2.14	0.50

TABLE D-1d

PARAMETER NAME (UNITS)	STATION 13 2/19/79	STATION 14 2/22/79	STATION 15 2/19/79	STATION 16 2/19/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	10.0	13.0	10.5	10.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	75.	176.	90.	101.
OXIDATION REDUCTION POTENTIAL (MV)	450	--	400	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.4	9.3	10.2	10.0
PH (STD UNITS)	7.70	7.70	7.70	7.60
LABORATORY DATA				
COLOR (PT-CO UNITS)	80.	35.	80.	80.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.60	2.40	7.60	9.60
TOTAL FILTERABLE RESIDUE (MG/L)	65.	116.	70.	90.
TOTAL NONFILTERABLE RESIDUE (MG/L)	9.	5.	10.	8.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	24.	78.	31.	36.
CHLORIDE (MG CL/L)	6.	5.	6.	7.
SULFATE, TOTAL (MG SO4/L)	4.	< 1.	4.	4.
CALCIUM, TOTAL (MG CA/L)	7.3	20.8	8.1	10.9
HARDNESS, TOTAL (MG CACO3/L)	25.9	55.8	27.8	34.4
IRON, DISSOLVED (UG FE/L)	250	80	250	200
IRON, TOTAL (UG FE/L)	1420	410	1410	1300
MAGNESIUM, TOTAL (MG MG/L)	1.1	0.8	1.1	1.1
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	< 50	60	< 50
POTASSIUM, TOTAL (MG K/L)	1.4	0.6	1.4	1.6
SODIUM, TOTAL (MG NA/L)	2.60	3.40	2.70	3.00
ZINC, TOTAL (UG ZN/L)	30	10	30	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	5.	3.	4.
CARBON, TOTAL ORGANIC (MG C/L)	4.	5.	4.	5.
CARBON DIOXIDE (MG CO2/L)	1.2	3.7	1.5	2.3
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	0.02	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.38	0.38	0.42	0.45
NITROGEN, TOTAL INORGANIC (MG N/L)	<0.40	0.40	0.44	0.47
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.3	0.5	0.4
NITROGEN, TOTAL ORGANIC (MG N/L)	< 0.4	0.3	0.4	0.4
NITROGEN, TOTAL (MG N/L)	0.8	0.7	0.9	0.9
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.04	<0.01	0.03	0.04
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.02	0.05	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.94	1.74	< 2.13	2.09
FECAL STREPTOCOCCI (LOG10(/100ML))	0.70	1.65	0.0	1.81
FC/FS RATIO	17.60	1.22	--	19.02

TABLE D-1e

PARAMETER NAME (UNITS)	STATION 17 2/19/79	STATION 18 2/20/79	STATION 19 2/20/79
PHYSICAL DATA			
MISCELLANEOUS DATA			
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0
FIELD MEASUREMENTS			
WATER TEMPERATURE (DEG C)	10.5	9.0	9.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	97.	74.	77.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.8	11.0	10.7
PH (STD UNITS)	7.80	7.40	7.30
LABORATORY DATA			
COLOR (PT-CO UNITS)	75.	70.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.40	7.10	9.90
TOTAL FILTERABLE RESIDUE (MG/L)	84.	63.	70.
TOTAL NONFILTERABLE RESIDUE (MG/L)	9.	13.	16.
CHEMICAL DATA			
MINERALS AND METALS			
ALKALINITY, TOTAL (MG CACO3/L)	37.	26.	25.
CHLORIDE (MG CL/L)	5.	4.	4.
SULFATE, TOTAL (MG SO4/L)	4.	6.	6.
CALCIUM, TOTAL (MG CA/L)	10.8	6.3	6.4
HARDNESS, TOTAL (MG CACO3/L)	33.4	23.6	24.1
IRON, DISSOLVED (UG FE/L)	250	230	240
IRON, TOTAL (UG FE/L)	1300	1230	1240
MAGNESIUM, TOTAL (MG MG/L)	1.0	1.3	1.4
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	60	60
POTASSIUM, TOTAL (MG K/L)	1.2	1.7	1.8
SODIUM, TOTAL (MG NA/L)	2.10	5.00	5.40
ZINC, TOTAL (UG ZN/L)	20	20	30
NUTRIENTS			
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	3.	4.
CARBON, TOTAL ORGANIC (MG C/L)	5.	6.	5.
CARBON DIOXIDE (MG CO2/L)	1.5	2.7	3.2
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.03	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.47	0.38	0.40
NITROGEN, TOTAL INORGANIC (MG N/L)	0.49	0.41	<0.42
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.5	0.4
NITROGEN, TOTAL ORGANIC (MG N/L)	0.4	0.4	< 0.3
NITROGEN, TOTAL (MG N/L)	0.9	0.8	0.8
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.05	0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.05	0.05
BIOLOGICAL DATA			
BACTERIOLOGICAL DATA			
FECAL COLIFORM (LOG10(/100ML))	3.15	1.43	1.08
FECAL STREPTOCOCCI (LOG10(/100ML))	2.01	1.49	0.60
FC/FS RATIO	13.70	0.87	3.00

TABLE D-2a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

WATER QUALITY SAMPLING RESULTS
Grab Samples

PARAMETER NAME (UNITS)	STATION 01 4/ 4/79	STATION 02 4/ 4/79	STATION 03 4/ 4/79	STATION 04 4/ 4/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	15.0	15.0	15.0	15.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	54.	54.	58.	58.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.8	9.8	9.8	10.0
PH (STD UNITS)	7.20	7.10	7.20	7.20
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	60.	65.	50.
TURBIDITY, HACH TURBIDIMETER (FTU)	29.00	30.00	31.00	16.00
TOTAL FILTERABLE RESIDUE (MG/L)	51.	53.	50.	47.
TOTAL NONFILTERABLE RESIDUE (MG/L)	45.	47.	57.	20.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	11.	11.	11.	18.
SULFATE, TOTAL (MG SO4/L)	4.	4.	3.	5.
IRON, DISSOLVED (UG FE/L)	210	160	200	170
IRON, TOTAL (UG FE/L)	2900	3160	3450	1280
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	120	130	140	< 50
ZINC, TOTAL (UG ZN/L)	30	30	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	7.	7.	7.	6.
CARBON DIOXIDE (MG CO2/L)	1.5	1.9	1.5	2.6
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.05	0.05	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.36	0.35	0.35	0.34
NITROGEN, TOTAL INORGANIC (MG N/L)	0.40	0.40	0.40	<0.36
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.06	0.06	0.04

TABLE D-2b

PARAMETER NAME (UNITS)	STATION 05 4/ 4/79	STATION 06 4/ 4/79	STATION 07 4/ 3/79	STATION 08 4/ 3/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	105.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	15.0	16.0	17.0	17.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	66.	65.	75.	87.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	400	420
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.0	9.6	9.2	8.8
PH (STD UNITS)	7.30	7.20	7.30	7.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	55.	45.	48.
TURBIDITY, HACH TURBIDIMETER (FTU)	20.00	15.00	12.00	12.00
TOTAL FILTERABLE RESIDUE (MG/L)	56.	54.	61.	69.
TOTAL NONFILTERABLE RESIDUE (MG/L)	28.	15.	14.	15.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	14.	15.	20.	20.
SULFATE, TOTAL (MG SO4/L)	6.	6.	7.	7.
IRON, DISSOLVED (UG FE/L)	200	160	210	200
IRON, TOTAL (UG FE/L)	1600	1220	1030	1100
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	< 50	< 50
ZINC, TOTAL (UG ZN/L)	30	40	50	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	< 6.	6.	5.	4.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	5.	5.
CARBON DIOXIDE (MG CO2/L)	1.5	2.1	2.1	3.5
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.03	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.32	0.33	0.35	0.36
NITROGEN, TOTAL INORGANIC (MG N/L)	0.34	0.36	<0.37	<0.38
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.05	0.04	0.04

TABLE D-2c

PARAMETER NAME (UNITS)	STATION 09 4/ 3/79	STATION 10 4/ 2/79	STATION 11 4/ 3/79	STATION 13 4/ 2/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	85.	40.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	18.0	18.0	19.0	19.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	74.	71.	89.	106.
OXIDATION REDUCTION POTENTIAL (MV)	390	380	290	340
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.9	9.0	9.0	10.6
PH (STD UNITS)	7.30	7.30	7.10	8.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	50.	48.	40.	39.
TURBIDITY, HACH TURBIDIMETER (FTU)	13.00	16.00	8.20	7.40
TOTAL FILTERABLE RESIDUE (MG/L)	58.	56.	60.	79.
TOTAL NONFILTERABLE RESIDUE (MG/L)	19.	20.	12.	16.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	18.	12.	29.	38.
SULFATE, TOTAL (MG SO4/L)	7.	6.	5.	2.
IRON, DISSOLVED (UG FE/L)	220	250	160	250
IRON, TOTAL (UG FE/L)	1180	1380	760	1080
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	50	60	< 50	< 50
ZINC, TOTAL (UG ZN/L)	50	60	20	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	6.	< 5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	7.	5.	5.
CARBON DIOXIDE (MG CO2/L)	1.9	1.3	4.9	0.6
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	<0.02	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.27	0.27	0.25	0.43
NITROGEN, TOTAL INORGANIC (MG N/L)	0.29	<0.29	<0.27	<0.45
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	<0.01	<0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.04	0.05

TABLE D-2d

PARAMETER NAME (UNITS)	STATION 14 4/ 2/79	STATION 15 4/ 2/79	STATION 16 4/ 2/79	STATION 17 4/ 2/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	22.0	20.0	18.[illegible]	18.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	201.	105.	117.	116.
OXIDATION REDUCTION POTENTIAL (MV)	420	280	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.0	9.8	8.8	8.4
PH (STD UNITS)	8.40	7.80	7.40	7.80
LABORATORY DATA				
COLOR (PT-CO UNITS)	23.	41.	42.	42.
TURBIDITY, HACH TURBIDIMETER (FTU)	4.70	7.90	5.70	5.70
TOTAL FILTERABLE RESIDUE (MG/L)	111.	76.	87.	81.
TOTAL NONFILTERABLE RESIDUE (MG/L)	4.	10.	4.	4.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	85.	37.	43.	44.
SULFATE, TOTAL (MG SO4/L)	< 1.	2.	2.	2.
IRON, DISSOLVED (UG FE/L)	140	220	260	210
IRON, TOTAL (UG FE/L)	350	1090	800	830
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	< 50	< 50
ZINC, TOTAL (UG ZN/L)	< 10	60	40	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	3.	3.	3.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	4.	4.
CARBON DIOXIDE (MG CO2/L)	0.7	1.2	3.7	1.5
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	<0.02	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.36	0.46	0.51	0.50
NITROGEN, TOTAL INORGANIC (MG N/L)	<0.38	<0.48	<0.53	<0.52
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	0.02	0.03
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.05	0.04	0.04

TABLE D-2e

PARAMETER NAME (UNITS)	STATION 18 4/ 3/79	STATION 19 4/ 3/79
PHYSICAL DATA		
MISCELLANEOUS DATA		
X-SECTION LOC (XFROM R-BK LK UPST)	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0
FIELD MEASUREMENTS		
WATER TEMPERATURE (DEG C)	19.0	19.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	101.	101.
OXIDATION REDUCTION POTENTIAL (MV)	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.4	8.3
PH (STD UNITS)	7.80	7.80
LABORATORY DATA		
COLOR (PT-CO UNITS)	39.	39.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.50	8.30
TOTAL FILTERABLE RESIDUE (MG/L)	73.	55.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	13.
CHEMICAL DATA		
MINERALS AND METALS		
ALKALINITY, TOTAL (MG CACO3/L)	38.	38.
SULFATE, TOTAL (MG SO4/L)	4.	4.
IRON, DISSOLVED (UG FE/L)	190	200
IRON, TOTAL (UG FE/L)	880	980
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50
ZINC, TOTAL (UG ZN/L)	< 10	20
NUTRIENTS		
CARBON, DISSOLVED ORGANIC (MG C/L)	< 5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.
CARBON DIOXIDE (MG CO2/L)	1.3	1.3
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.32	0.28
NITROGEN, TOTAL INORGANIC (MG N/L)	0.34	0.30
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.05

TABLE D-3a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6/1979)

WATER QUALITY SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 6/ 6/79	STATION 02 6/ 6/79	STATION 03 6/ 6/79	STATION 04 6/ 6/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	24.0	24.0	24.0	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	51.	53.	53.	56.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.6	7.7	7.8	8.2
PH (STD UNITS)	6.90	7.00	6.90	7.00
LABORATORY DATA				
COLOR (PT-CO UNITS)	55.	48.	55.	60.
TURBIDITY, HACH TURBIDIMETER (FTU)	17.00	18.00	17.00	19.00
TOTAL FILTERABLE RESIDUE (MG/L)	38.	28.	30.	36.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	14.	12.	16.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	13.	13.	13.	14.
SULFATE, TOTAL (MG SO4/L)	4.	3.	4.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	150	120	130	110
IRON, TOTAL (UG FE/L)	1550	1520	1570	1580
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	80	80	80
ZINC, TOTAL (UG ZN/L)	30	< 10	10	10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	< 6.	6.	5.	6.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	8.
CARBON DIOXIDE (MG CO2/L)	3.2	2.6	3.2	2.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.09	0.09	0.09	0.09
NITROGEN, NITRATE+NITRITE (MG N/L)	0.21	0.22	0.28	0.28
NITROGEN, TOTAL INORGANIC (MG N/L)	0.30	0.31	0.37	0.37
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	0.03	0.01	0.03
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.03	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.95	1.51	0.95	1.32
FECAL STREPTOCOCCI (LOG10(/100ML))	1.62	2.11	1.61	2.63
FC/FS RATIO	0.21	0.25	0.22	0.05

TABLE D-3b

PARAMETER NAME (UNITS)	STATION 05 6/ 6/79	STATION 06 6/ 6/79	STATION 07 6/ 5/79	STATION 07 6/ 5/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	9.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	24.0	24.0	25.0	--
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	66.	61.	68.	--
OXIDATION REDUCTION POTENTIAL (MV)	--	--	400	350
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.1	7.1	7.5	--
PH (STD UNITS)	7.00	6.90	7.30	6.40
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	60.	12.	17.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00	15.00	17.00	18.00
TOTAL FILTERABLE RESIDUE (MG/L)	55.	46.	66.	58.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	19.	16.	18.	19.
SULFATE, TOTAL (MG SO4/L)	6.	5.	< 1.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	150	140	230	< 50
IRON, TOTAL (UG FE/L)	1120	1100	1250	1210
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	60	< 50	< 50
ZINC, TOTAL (UG ZN/L)	< 10	< 10	20	< 10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	6.	7.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	7.	8.	6.
CARBON DIOXIDE (MG CO2/L)	3.8	3.9	1.8	--
NITROGEN, TOTAL AMMONIA (MG N/L)	0.07	0.06	0.07	0.06
NITROGEN, NITRATE+NITRITE (MG N/L)	0.29	0.23	0.23	0.25
NITROGEN, TOTAL INORGANIC (MG N/L)	0.36	0.29	0.30	0.31
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	0.02	0.02	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.07	0.03	0.03	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.23	1.38	1.78	--
FECAL STREPTOCOCCI (LOG10(/100ML))	1.99	1.76	1.64	--
FC/FS RATIO	0.17	0.42	1.36	--

TABLE D-3c

PARAMETER NAME (UNITS)	STATION 08 6/ 5/79	STATION 09 6/ 5/79	STATION 09 6/ 5/79	STATION 10 6/ 5/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	105.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	4.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	25.0	26.0	25.0	25.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	68.	67.	68.	63.
OXIDATION REDUCTION POTENTIAL (MV)	370	400	410	400
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.2	8.8	6.3	7.3
PH (STD UNITS)	7.20	7.40	7.10	7.30
LABORATORY DATA				
COLOR (PT-CO UNITS)	45.	23.	36.	30.
TURBIDITY, HACH TURBIDIMETER (FTU)	18.00	22.00	20.00	25.00
TOTAL FILTERABLE RESIDUE (MG/L)	57.	45.	62.	61.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	< 10.	13.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	20.	19.	19.	18.
SULFATE, TOTAL (MG SO4/L)	4.	4.	4.	6.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	230	170	< 50	220
IRON, TOTAL (UG FE/L)	1230	1170	1830	1800
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	50	80	60
ZINC, TOTAL (UG ZN/L)	10	< 10	< 10	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	< 6.	< 6.	6.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	8.
CARBON DIOXIDE (MG CO2/L)	2.5	1.5	2.9	1.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.07	0.07	0.04	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.25	0.17	0.21	0.20
NITROGEN, TOTAL INORGANIC (MG N/L)	0.32	0.24	0.25	0.25
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	<0.01	0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.04	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	<0.00	1.30	--	1.75
FECAL STREPTOCOCCI (LOG10(/100ML))	2.48	2.78	--	1.62
FC/FS RATIO	<0.01	0.03	--	1.33

TABLE D-3d

PARAMETER NAME (UNITS)	STATION 10 6/ 5/79	STATION 11 6/ 5/79	STATION 11 6/ 5/79	STATION 12 6/ 6/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	80.	80.	50.
SAMPLE DEPTH (METERS)	6.0	1.0	5.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	25.0	27.0	25.0	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	70.	77.	82.	97.
OXIDATION REDUCTION POTENTIAL (MV)	400	340	380	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.2	7.2	5.9	7.6
PH (STD UNITS)	7.00	8.00	7.20	--
LABORATORY DATA				
COLOR (PT-CO UNITS)	27.	14.	23.	18.
TURBIDITY, HACH TURBIDIMETER (FTU)	27.00	18.00	18.00	1.80
TOTAL FILTERABLE RESIDUE (MG/L)	50.	49.	33.	49.
TOTAL NONFILTERABLE RESIDUE (MG/L)	18.	< 10.	14.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	18.	26.	24.	39.
SULFATE, TOTAL (MG SO4/L)	4.	5.	6.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	220	< 50	< 50
IRON, TOTAL (UG FE/L)	1820	850	1130	580
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	90	< 50	70	70
ZINC, TOTAL (UG ZN/L)	< 10	< 10	< 10	10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	6.	6.	< 8.
CARBON, TOTAL ORGANIC (MG C/L)	6.	8.	6.	8.
CARBON DIOXIDE (MG CO2/L)	3.5	0.5	2.9	--
NITROGEN, TOTAL AMMONIA (MG N/L)	0.07	0.02	0.02	0.04
NITROGEN, NITRATE+NITRITE (MG N/L)	0.20	0.17	0.20	0.02
NITROGEN, TOTAL INORGANIC (MG N/L)	0.27	0.19	0.22	0.06
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	0.03	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.03	0.04	<0.01
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	0.00	--	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	--	1.54	--	2.32
FC/FS RATIO	--	0.03	--	<0.01

TABLE D-3e

PARAMETER NAME (UNITS)	STATION 13 6/ 4/79	STATION 13 6/ 4/79	STATION 14 6/ 4/79	STATION 15 6/ 4/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	40.	40.	50.	40.
SAMPLE DEPTH (METERS)	1.0	8.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	25.0	17.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	136.	149.	226.	130.
OXIDATION REDUCTION POTENTIAL (MV)	340	370	--	310
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.3	6.2	7.1	9.5
PH (STD UNITS)	8.50	7.70	8.40	8.40
LABORATORY DATA				
COLOR (PT-CO UNITS)	11.	24.	15.	23.
TURBIDITY, HACH TURBIDIMETER (FTU)	3.80	15.00	4.10	9.60
TOTAL FILTERABLE RESIDUE (MG/L)	78.	86.	104.	78.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	10.	< 10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	55.	58.	44.	48.
SULFATE, TOTAL (MG SO4/L)	1.	2.	< 1.	2.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	60	< 50	70	100
IRON, TOTAL (UG FE/L)	310	1000	170	1040
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	110	< 50	60
ZINC, TOTAL (UG ZN/L)	20	< 10	20	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	3.	4.	< 4.	3.
CARBON, TOTAL ORGANIC (MG C/L)	5.	4.	4.	4.
CARBON DIOXIDE (MG CO2/L)	0.3	2.3	0.4	0.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05	0.10	0.04	0.06
NITROGEN, NITRATE+NITRITE (MG N/L)	0.36	0.47	0.53	0.42
NITROGEN, TOTAL INORGANIC (MG N/L)	0.41	0.57	0.57	0.48
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.02	0.02	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.09	0.03	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.00	--	1.54	1.00
FECAL STREPTOCOCCI (LOG10(/100ML))	0.48	--	1.82	0.90
FC/FS RATIO	0.33	--	0.53	1.25

TABLE D-3f

PARAMETER NAME (UNITS)	STATION 15 6/ 4/79	STATION 16 6/ 4/79	STATION 17 6/ 4/79	STATION 18 6/ 5/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	40.	50.	50.	50.
SAMPLE DEPTH (METERS)	6.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	26.0	26.0	25.0	26.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	135.	127.	105.	93.
OXIDATION REDUCTION POTENTIAL (MV)	310	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.0	6.8	7.1	7.1
PH (STD UNITS)	7.90	7.40	7.40	7.50
LABORATORY DATA				
COLOR (PT-CO UNITS)	30.	50.	48.	8.
TURBIDITY, HACH TURBIDIMETER (FTU)	14.00	4.50	15.00	13.00
TOTAL FILTERABLE RESIDUE (MG/L)	80.	76.	72.	79.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	< 10.	< 10.	13.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	53.	54.	47.	33.
SULFATE, TOTAL (MG SO4/L)	2.	2.	2.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	360	440	160
IRON, TOTAL (UG FE/L)	1430	1630	1520	980
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	100	< 50	< 50	60
ZINC, TOTAL (UG ZN/L)	30	20	40	< 10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	3.	2.	3.	6.
CARBON, TOTAL ORGANIC (MG C/L)	4.	3.	4.	6.
CARBON DIOXIDE (MG CO2/L)	1.3	4.1	3.6	2.0
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.08	0.07	0.04
NITROGEN, NITRATE+NITRITE (MG N/L)	0.53	0.70	0.68	0.23
NITROGEN, TOTAL INORGANIC (MG N/L)	0.57	0.78	0.75	0.27
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	0.06	0.06	0.04
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.07	0.07	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	2.61	2.66	0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	--	1.11	1.15	3.66
FC/FS RATIO	--	31.50	34.90	<0.01

TABLE D-3g

PARAMETER NAME (UNITS)	STATION 19 6/ 5/79
PHYSICAL DATA	
MISCELLANEOUS DATA	
X-SECTION LOC (%FROM R-BK LK UPST)	50.
SAMPLE DEPTH (METERS)	1.0
FIELD MEASUREMENTS	
WATER TEMPERATURE (DEG C)	26.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	98.
OXIDATION REDUCTION POTENTIAL (MV)	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.9
PH (STD UNITS)	7.40
LABORATORY DATA	
COLOR (PT-CO UNITS)	8.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00
TOTAL FILTERABLE RESIDUE (MG/L)	56.
TOTAL NONFILTERABLE RESIDUE (MG/L)	11.
CHEMICAL DATA	
MINERALS AND METALS	
ALKALINITY, TOTAL (MG CACO3/L)	33.
SULFATE, TOTAL (MG SO4/L)	4.
SULFIDE, TOTAL (MG S/L)	< 0.1
IRON, DISSOLVED (UG FE/L)	120
IRON, TOTAL (UG FE/L)	960
MANGANESE, DISSOLVED (UG MN/L)	< 50
MANGANESE, TOTAL (UG MN/L)	60
ZINC, TOTAL (UG ZN/L)	< 10
NUTRIENTS	
CARBON, DISSOLVED ORGANIC (MG C/L)	< 6.
CARBON, TOTAL ORGANIC (MG C/L)	6.
CARBON DIOXIDE (MG CO2/L)	2.5
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04
NITROGEN, NITRATE+NITRITE (MG N/L)	0.23
NITROGEN, TOTAL INORGANIC (MG N/L)	0.27
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03
BIOLOGICAL DATA	
BACTERIOLOGICAL DATA	
FECAL COLIFORM (LOG10(/100ML))	0.48
FECAL STREPTOCOCCI (LOG10(/100ML))	3.97
FC/FS RATIO	<0.01

TABLE D-4a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-010) PHASE II, CYCLE 4 (7/16-19/1979)

WATER QUALITY SAMPLING RESULTS

Grab Samples

PARAMETER NAME (UNITS)	STATION 01 7/19/79	STATION 02 7/19/79	STATION 03 7/18/79	STATION 04 7/18/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	27.5	28.0	27.5	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	60.	64.	67.	73.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.3	7.0	8.1	7.3
PH (STD UNITS)	7.30	7.00	7.10	7.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	32.	38.	45.	70.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.00	8.50	9.80	12.00
TOTAL FILTERABLE RESIDUE (MG/L)	61.	60.	56.	68.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	11.	11.	27.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	16.	17.	20.	23.
SULFATE, TOTAL (MG SO4/L)	5.	5.	4.	11.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	60	60	100	100
IRON, TOTAL (UG FE/L)	650	730	1030	1580
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	60
MANGANESE, TOTAL (UG MN/L)	60	50	60	130
ZINC, TOTAL (UG ZN/L)	20	20	40	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	6.	6.	10.
CARBON DIOXIDE (MG CO2/L)	1.5	3.1	3.0	3.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05	0.02	0.02	0.04
NITROGEN, NITRATE+NITRITE (MG N/L)	0.17	0.17	0.24	0.24
NITROGEN, TOTAL INORGANIC (MG N/L)	0.22	0.19	0.25	0.28
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.05	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.00	0.85	<0.00	1.90
FECAL STREPTOCOCCI (LOG10(/100ML))	1.68	1.82	1.89	2.32
FC/FS RATIO	0.02	0.11	<0.01	0.38

TABLE D-4b

PARAMETER NAME (UNITS)	STATION 05 7/18/79	STATION 06 7/18/79	STATION 07 7/18/79	STATION 07 7/18/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	40.	40.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	6.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	27.0	28.0	28.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	77.	77.	80.	83.
OXIDATION REDUCTION POTENTIAL (MV)	---	---	350	360
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.9	7.9	7.4	7.4
PH (STD UNITS)	7.20	7.10	7.30	7.20
LABORATORY DATA				
COLOR (PT-CO UNITS)	70.	65.	65.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	19.00	13.00	12.00	13.00
TOTAL FILTERABLE RESIDUE (MG/L)	76.	72.	78.	73.
TOTAL NONFILTERABLE RESIDUE (MG/L)	29.	12.	10.	11.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	19.	21.	23.	22.
SULFATE, TOTAL (MG SO4/L)	8.	6.	6.	6.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	100	180	120	110
IRON, TOTAL (UG FE/L)	1810	1380	870	1350
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	140	100	< 50	< 50
ZINC, TOTAL (UG ZN/L)	20	10	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	4.	6.	5.
CARBON, TOTAL ORGANIC (MG C/L)	8.	9.	8.	6.
CARBON DIOXIDE (MG CO2/L)	2.2	3.2	2.2	2.6
NITROGEN, TOTAL AMMONIA (MG N/L)	0.06	0.04	0.06	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.26	0.36	0.26	0.26
NITROGEN, TOTAL INORGANIC (MG N/L)	0.32	0.40	0.32	0.31
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.06	0.05	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	<0.00	<0.00	0.70	--
FECAL STREPTOCOCCI (LOG10(/100ML))	2.46	1.85	1.41	--
FC/FS RATIO	<0.01	<0.01	0.19	--

TABLE D-4c

PARAMETER NAME (UNITS)	STATION 08 7/17/79	STATION 09 7/17/79	STATION 09 7/17/79	STATION 10 7/17/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	40.
SAMPLE DEPTH (METERS)	1.0	1.0	5.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	28.0	27.5	28.0
SPFC CONDUCTANCE, FLD (UMHO/CM 25C)	88.	80.	81.	80.
OXIDATION REDUCTION POTENTIAL (MV)	410	370	380	370
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.3	7.3	5.2	6.7
PH (STD UNITS)	7.40	7.60	7.20	8.20
LABORATORY DATA				
COLOR (PT-CO UNITS)	95.	95.	110.	80.
TURBIDITY, HACH TURBIDIMETER (FTU)	13.00	12.00	15.00	12.00
TOTAL FILTERABLE RESIDUE (MG/L)	73.	64.	69.	62.
TOTAL NONFILTERABLE RESIDUE (MG/L)	9.	13.	13.	14.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	28.	23.	24.	24.
SULFATE, TOTAL (MG SO4/L)	6.	7.	7.	7.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	100	100	100	60
IRON, TOTAL (UG FE/L)	850	850	930	800
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	80	120	160	110
ZINC, TOTAL (UG ZN/L)	30	40	20	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	7.	5.	4.
CARBON, TOTAL ORGANIC (MG C/L)	8.	7.	6.	5.
CARBON DIOXIDE (MG CO2/L)	2.1	1.1	2.9	0.3
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	0.02	0.04	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.21	0.17	0.18	0.09
NITROGEN, TOTAL INORGANIC (MG N/L)	<0.23	0.19	0.22	0.11
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	<0.01	0.02	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.04	0.05	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.04	0.00	--	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	1.65	1.53	--	1.53
FC/FS RATIO	0.24	0.03	--	<0.03

TABLE D-4d

PARAMETER NAME (UNITS)	STATION 10 7/17/79	STATION 11 7/17/79	STATION 11 7/17/79	STATION 12 7/18/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	40.	60.	60.	50.
SAMPLE DEPTH (METERS)	5.0	1.0	5.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	29.0	28.0	30.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	80.	83.	99.	86.
OXIDATION REDUCTION POTENTIAL (MV)	390	400	380	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.2	7.1	4.2	8.3
PH (STD UNITS)	7.30	7.60	7.50	7.30
LABORATORY DATA				
COLOR (PT-CO UNITS)	100.	75.	75.	15.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00	11.00	11.00	1.60
TOTAL FILTERABLE RESIDUE (MG/L)	60.	66.	75.	71.
TOTAL NONFILTERABLE RESIDUE (MG/L)	15.	10.	17.	2.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	26.	27.	29.	34.
SULFATE, TOTAL (MG SO4/L)	7.	6.	5.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	60	80	80	< 50
IRON, TOTAL (UG FE/L)	910	800	650	120
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	140	90	130	< 50
ZINC, TOTAL (UG ZN/L)	20	20	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	6.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	6.
CARBON DIOXIDE (MG CO2/L)	2.4	1.3	1.7	3.1
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.02	0.02	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.20	0.10	0.19	0.02
NITROGEN, TOTAL INORGANIC (MG N/L)	0.22	0.12	0.21	0.07
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.04	0.02
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	<0.00	--	<0.48
FECAL STREPTOCOCCI (LOG10(/100ML))	--	0.48	--	0.90
FC/FS RATIO	--	<0.33	--	<0.43

TABLE D-4e

PARAMETER NAME (UNITS)	STATION 13 7/16/79	STATION 13 7/16/79	STATION 14 7/16/79	STATION 15 7/16/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	30.	30.	50.	60.
SAMPLE DEPTH (METERS)	1.0	8.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	31.0	27.0	29.0	30.0
SPFC CONDUCTANCE, FLD (UMHO/CM 25C)	136.	146.	184.	126.
OXIDATION REDUCTION POTENTIAL (MV)	340	360	--	360
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.2	5.2	9.2	12.3
PH (STD UNITS)	8.50	7.50	8.00	8.70
LABORATORY DATA				
COLOR (PT-CO UNITS)	20.	35.	23.	28.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.10	17.00	5.00	8.50
TOTAL FILTERABLE RESIDUE (MG/L)	101.	99.	119.	92.
TOTAL NONFILTERABLE RESIDUE (MG/L)	5.	24.	5.	9.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	59.	55.	81.	50.
SULFATE, TOTAL (MG SO4/L)	2.	2.	2.	3.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	60	90	90	60
IRON, TOTAL (UG FE/L)	390	1620	250	400
MANGANESE, DISSOLVED (UG MN/L)	< 50	90	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	260	< 50	60
ZINC, TOTAL (UG ZN/L)	30	40	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	4.	6.	4.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	7.	7.
CARBON DIOXIDE (MG CO2/L)	0.3	3.3	1.5	0.2
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.06	0.06	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.20	0.57	0.37	0.35
NITROGEN, TOTAL INORGANIC (MG N/L)	0.23	0.62	0.43	<0.37
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.03	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.07	0.02	0.07
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.00	--	0.90	0.60
FECAL STREPTOCOCCI (LOG10(/100ML))	0.48	--	1.58	0.79
FC/FS RATIO	0.33	--	0.21	0.67

TABLE D-4f

PARAMETER NAME (UNITS)	STATION 15 7/16/79	STATION 16 7/16/79	STATION 17 7/16/79	STATION 18 7/17/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	60.	5.	5.	50.
SAMPLE DEPTH (METERS)	3.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.5	27.5	27.0	28.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	126.	114.	106.	113.
OXIDATION REDUCTION POTENTIAL (MV)	330	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.8	6.8	6.6	6.6
PH (STD UNITS)	8.30	7.60	7.20	7.50
LABORATORY DATA				
COLOR (PT-CO UNITS)	33.	45.	55.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.00	9.20	9.60	9.40
TOTAL FILTERABLE RESIDUE (MG/L)	136.	86.	89.	81.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	7.	10.	12.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	46.	42.	37.	41.
SULFATE, TOTAL (MG SO4/L)	3.	3.	3.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	80	110	260	70
IRON, TOTAL (UG FE/L)	740	810	1200	1020
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	80	60	100	120
ZINC, TOTAL (UG ZN/L)	40	40	50	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	7.
CARBON DIOXIDE (MG CO2/L)	0.4	2.0	4.4	2.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.03	<0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.53	0.52	0.48	0.22
NITROGEN, TOTAL INORGANIC (MG N/L)	0.55	0.55	<0.50	0.24
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.03	0.03	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.06	0.05	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	1.95	2.10	0.48
FECAL STREPTOCOCCI (LOG10(/100ML))	--	1.04	1.89	3.32
FC/FS RATIO	--	8.18	1.62	<0.01

TABLE D-4g

PARAMETER NAME (UNITS)	STATION 19 7/17/79
PHYSICAL DATA	
MISCELLANEOUS DATA	
X-SECTION LOC (%FROM R-BK LK UPST)	50.
SAMPLE DEPTH (METERS)	1.0
FIELD MEASUREMENTS	
WATER TEMPERATURE (DEG C)	28.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	112.
OXIDATION REDUCTION POTENTIAL (MV)	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.6
PH (STD UNITS)	7.30
LABORATORY DATA	
COLOR (PT-CO UNITS)	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.60
TOTAL FILTERABLE RESIDUE (MG/L)	82.
TOTAL NONFILTERABLE RESIDUE (MG/L)	12.
CHEMICAL DATA	
MINERALS AND METALS	
ALKALINITY, TOTAL (MG CACO3/L)	40.
SULFATE, TOTAL (MG SO4/L)	5.
SULFIDE, TOTAL (MG S/L)	< 0.1
IRON, DISSOLVED (UG FE/L)	60
IRON, TOTAL (UG FE/L)	920
MANGANESE, DISSOLVED (UG MN/L)	< 50
MANGANESE, TOTAL (UG MN/L)	110
ZINC, TOTAL (UG ZN/L)	30
NUTRIENTS	
CARBON, DISSOLVED ORGANIC (MG C/L)	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.
CARBON DIOXIDE (MG CO2/L)	3.7
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.22
NITROGEN, TOTAL INORGANIC (MG N/L)	0.27
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05
BIOLOGICAL DATA	
BACTERIOLOGICAL DATA	
FECAL COLIFORM (LOG10(/100ML))	1.11
FECAL STREPTOCOCCI (LOG10(/100ML))	3.46
FC/FS RATIO	<0.01

TABLE D-5a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0131) PHASE II, CYCLE 5 (8/13-16/1979)

WATER QUALITY SAMPLING RESULTS

Grab Samples

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	28.0	28.0	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	61.	73.	74.	64.
OXIDATION REDUCTION POTENTIAL (MV)	---	---	---	---
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.8	7.3	7.8	7.8
PH (STD UNITS)	7.00	7.30	7.30	8.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	24.	22.	22.	26.
TURBIDITY, HACH TURBIDIMETER (FTU)	3.80	4.30	4.50	3.90
TOTAL FILTERABLE RESIDUE (MG/L)	47.	47.	42.	45.
TOTAL NONFILTERABLE RESIDUE (MG/L)	4.	6.	< 2.	4.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	17.	18.	22.	12.
CHLORIDE (MG CL/L)	4.	4.	4.	4.
SULFATE, TOTAL (MG SO4/L)	4.	4.	5.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	3.7	4.1	4.2	3.8
HARDNESS, TOTAL (MG CACO3/L)	26.0	29.0	31.0	34.0
IRON, DISSOLVED (UG FE/L)	80	70	90	150
IRON, TOTAL (UG FE/L)	540	620	560	600
MAGNESIUM, TOTAL (MG MG/L)	1.5	1.6	1.5	1.4
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	80	60	60
POTASSIUM, TOTAL (MG K/L)	1.9	2.0	1.9	2.0
SODIUM, TOTAL (MG NA/L)	3.90	5.00	5.00	5.80
ZINC, TOTAL (UG ZN/L)	40	40	20	100
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	4.	4.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	5.	6.
CARBON DIOXIDE (MG CO2/L)	3.1	1.7	2.2	0.2
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.05	0.05	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.95	0.08	0.08	0.09
NITROGEN, TOTAL INORGANIC (MG N/L)	0.13	0.13	0.13	0.11
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.5	0.5	0.7
NITROGEN, TOTAL ORGANIC (MG N/L)	0.5	0.5	0.5	0.7
NITROGEN, TOTAL (MG N/L)	0.6	0.6	0.6	0.8
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.02	0.02	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.04	1.11	1.00	1.08
FECAL STREPTOCOCCI (LOG10(/100ML))	1.78	1.93	1.51	1.48
FC/FS RATIO	0.18	0.15	0.31	0.40

TABLE D-5[illegible]

PARAMETER NAME (UNITS)	STATION 05 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79	STATION 07 8/14/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	5.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	28.0	29.5	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	89.	84.	96.	103.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	480	500
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.4	7.0	7.6	5.3
PH (STD UNITS)	8.00	7.90	7.40	7.50
LABORATORY DATA				
COLOR (PT-CO UNITS)	49.	34.	36.	36.
TURBIDITY, HACH TURBIDIMETER (FTU)	6.50	4.50	5.00	4.80
TOTAL FILTERABLE RESIDUE (MG/L)	65.	59.	80.	70.
TOTAL NONFILTERABLE RESIDUE (MG/L)	4.	5.	7.	9.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	26.	24.	32.	34.
CHLORIDE (MG CL/L)	5.	4.	5.	4.
SULFATE, TOTAL (MG SO4/L)	8.	6.	6.	7.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	4.0	7.3	8.8	4.9
HARDNESS, TOTAL (MG CACO3/L)	33.0	34.0	55.0	50.0
IRON, DISSOLVED (UG FE/L)	90	90	160	140
IRON, TOTAL (UG FE/L)	650	690	590	330
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.6	1.6	1.5
MANGANESE, DISSOLVED (UG MN/L)	90	110	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	130	180	110	50
POTASSIUM, TOTAL (MG K/L)	1.9	2.0	2.0	1.8
SODIUM, TOTAL (MG NA/L)	8.70	7.70	4.00	3.50
ZINC, TOTAL (UG ZN/L)	20	30	30	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	4.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	8.	6.	5.	6.
CARBON DIOXIDE (MG CO2/L)	0.5	0.6	2.3	2.1
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.02	<0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.10	0.14	0.19	0.20
NITROGEN, TOTAL INORGANIC (MG N/L)	0.13	0.16	<0.21	0.22
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.6	0.6	0.5
NITROGEN, TOTAL ORGANIC (MG N/L)	0.6	0.6	> 0.6	0.5
NITROGEN, TOTAL (MG N/L)	0.7	0.8	< 0.8	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.02	0.02
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	<0.00	1.20	--	--
FECAL STREPTOCOCCI (LOG10(/100ML))	1.49	1.53	0.78	--
FC/FS RATIO	<0.03	0.47	--	--

TABLE D-5c

PARAMETER NAME (UNITS)	STATION 08 8/14/79	STATION 09 8/14/79	STATION 09 8/14/79	STATION 10 8/14/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	3.5	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	29.0	28.0	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	96.	86.	88.	85.
OXIDATION REDUCTION POTENTIAL (MV)	500	470	480	500
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.2	6.0	4.5	7.0
PH (STD UNITS)	7.30	7.50	7.30	7.70
LABORATORY DATA				
COLOR (PT-CO UNITS)	39.	55.	70.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.50	8.10	14.00	9.00
TOTAL FILTERABLE RESIDUE (MG/L)	74.	69.	74.	73.
TOTAL NONFILTERABLE RESIDUE (MG/L)	11.	10.	15.	10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	32.	27.	27.	27.
CHLORIDE (MG CL/L)	3.	4.	4.	4.
SULFATE, TOTAL (MG SO4/L)	6.	6.	5.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	6.5	5.0	4.7	5.9
HARDNESS, TOTAL (MG CACO3/L)	48.0	34.0	39.0	41.0
IRON, DISSOLVED (UG FE/L)	150	160	150	100
IRON, TOTAL (UG FE/L)	730	860	960	1170
MAGNESIUM, TOTAL (MG MG/L)	1.5	1.5	1.5	1.6
MANGANESE, DISSOLVED (UG MN/L)	< 50	50	60	< 50
MANGANESE, TOTAL (UG MN/L)	150	190	250	190
POTASSIUM, TOTAL (MG K/L)	1.9	2.0	1.8	2.1
SODIUM, TOTAL (MG NA/L)	7.00	7.80	6.50	7.50
ZINC, TOTAL (UG ZN/L)	50	110	110	40
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	6.	6.	7.
CARBON DIOXIDE (MG CO2/L)	3.0	1.6	2.6	1.9
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.10	0.10	0.09
NITROGEN, NITRATE+NITRITE (MG N/L)	0.18	0.07	0.08	0.07
NITROGEN, TOTAL INORGANIC (MG N/L)	0.21	0.17	0.18	0.16
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.7	0.6	0.6
NITROGEN, TOTAL ORGANIC (MG N/L)	0.6	0.6	0.5	0.5
NITROGEN, TOTAL (MG N/L)	0.8	0.7	0.7	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.04	0.03	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	--	--	--
FECAL STREPTOCOCCI (LOG10(/100ML))	1.43	1.11	--	0.70
FC/FS RATIO	--	--	--	--

TABLE D-5d

PARAMETER NAME (UNITS)	STATION 10 8/14/79	STATION 11 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	60.	60.	50.
SAMPLE DEPTH (METERS)	6.0	1.0	4.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	27.5	29.5	28.5	27.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	91.	91.	95.	93.
OXIDATION REDUCTION POTENTIAL (MV)	490	410	450	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	4.5	8.3	5.3	7.5
PH (STD UNITS)	7.20	8.05	7.40	7.90
LABORATORY DATA				
COLOR (PT-CO UNITS)	65.	43.	43.	14.
TURBIDITY, HACH TURBIDIMETER (FTU)	3.50	6.80	6.70	1.10
TOTAL FILTERABLE RESIDUE (MG/L)	56.	68.	74.	51.
TOTAL NONFILTERABLE RESIDUE (MG/L)	5.	7.	7.	< 2.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	27.	29.	27.	37.
CHLORIDE (MG CL/L)	4.	4.	3.	3.
SULFATE, TOTAL (MG SO4/L)	4.	4.	5.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	5.8	8.4	6.8	10.5
HARDNESS, TOTAL (MG CACO3/L)	38.0	39.0	43.0	50.0
IRON, DISSOLVED (UG FE/L)	110	80	90	80
IRON, TOTAL (UG FE/L)	970	570	510	260
MAGNESIUM, TOTAL (MG MG/L)	1.5	1.6	1.6	1.1
MANGANESE, DISSOLVED (UG MN/L)	50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	240	140	160	< 50
POTASSIUM, TOTAL (MG K/L)	1.9	1.8	1.7	0.2
SODIUM, TOTAL (MG NA/L)	7.00	5.60	5.80	1.50
ZINC, TOTAL (UG ZN/L)	70	40	40	50
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	7.
CARBON, TOTAL ORGANIC (MG C/L)	5.	6.	5.	7.
CARBON DIOXIDE (MG CO2/L)	3.2	0.5	2.0	0.9
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.13	0.05	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.08	0.09	0.05	0.01
NITROGEN, TOTAL INORGANIC (MG N/L)	0.11	0.22	0.10	<0.03
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.6	0.6	0.5
NITROGEN, TOTAL ORGANIC (MG N/L)	0.5	0.4	0.5	> 0.5
NITROGEN, TOTAL (MG N/L)	0.6	0.6	0.6	< 0.6
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.03	0.03	0.01
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	--	--	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	--	0.48	--	1.59
FC/FS RATIO	--	--	--	<0.03

TABLE D-5e

PARAMETER NAME (UNITS)	STATION 13 8/13/79	STATION 13 8/13/79	STATION 14 8/16/79	STATION 15 8/13/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	40.
SAMPLE DEPTH (METERS)	1.0	4.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	29.5	28.5	27.0	30.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	137.	140.	206.	140.
OXIDATION REDUCTION POTENTIAL (MV)	360	390	--	350
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.5	5.8	8.3	10.4
PH (STD UNITS)	8.80	8.10	8.10	9.90
LABORATORY DATA				
COLOR (PT-CO UNITS)	26.	32.	13.	32.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.10	6.90	2.00	3.70
TOTAL FILTERABLE RESIDUE (MG/L)	81.	76.	114.	77.
TOTAL NONFILTERABLE RESIDUE (MG/L)	8.	10.	3.	8.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	61.	63.	101.	64.
CHLORIDE (MG CL/L)	4.	4.	3.	4.
SULFATE, TOTAL (MG SO4/L)	1.	1.	< 1.	2.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	17.6	17.5	10.3	15.0
HARDNESS, TOTAL (MG CACO3/L)	62.0	73.0	117.0	64.0
IRON, DISSOLVED (UG FE/L)	60	70	70	90
IRON, TOTAL (UG FE/L)	490	700	370	470
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.5	0.8	1.5
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	100	< 50	60
POTASSIUM, TOTAL (MG K/L)	1.1	1.3	0.5	1.2
SODIUM, TOTAL (MG NA/L)	3.70	4.00	2.40	3.70
ZINC, TOTAL (UG ZN/L)	70	60	20	40
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	5.	< 5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	5.	5.
CARBON DIOXIDE (MG CO2/L)	0.2	0.9	1.5	0.1
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.04	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.18	0.21	0.48	0.24
NITROGEN, TOTAL INORGANIC (MG N/L)	0.20	0.25	0.50	0.26
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.7	0.7	0.4	0.7
NITROGEN, TOTAL ORGANIC (MG N/L)	0.7	0.6	0.4	0.7
NITROGEN, TOTAL (MG N/L)	0.9	0.9	0.9	0.9
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.05	0.02	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	<0.30	--	<0.30	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	1.33	--	0.95	0.85
FC/FS RATIO	<0.03	--	0.11	<0.14

TABLE D-5f

PARAMETER NAME (UNITS)	STATION 15 8/13/79	STATION 16 8/13/79	STATION 17 8/13/79	STATION 18 8/14/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	40.	50.	50.	50.
SAMPLE DEPTH (METERS)	4.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	28.0	28.5	27.0	28.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	147.	146.	144.	102.
OXIDATION REDUCTION POTENTIAL (MV)	390	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.1	7.2	6.5	6.7
PH (STD UNITS)	8.10	8.15	7.60	7.60
LABORATORY DATA				
COLOR (PT-CO UNITS)	32.	23.	29.	41.
TURBIDITY, HACH TURBIDIMETER (FTU)	4.60	3.70	2.50	7.60
TOTAL FILTERABLE RESIDUE (MG/L)	77.	97.	95.	73.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	6.	2.	11.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	63.	63.	63.	36.
CHLORIDE (MG CL/L)	5.	5.	4.	4.
SULFATE, TOTAL (MG SO4/L)	1.	1.	2.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	19.7	16.9	18.3	8.4
HARDNESS, TOTAL (MG CACO3/L)	81.0	89.0	86.5	53.0
IRON, DISSOLVED (UG FE/L)	90	120	130	90
IRON, TOTAL (UG FE/L)	440	530	460	690
MAGNESIUM, TOTAL (MG MG/L)	1.7	1.3	1.2	1.9
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	120	60	< 50	160
POTASSIUM, TOTAL (MG K/L)	1.4	1.3	1.3	2.1
SODIUM, TOTAL (MG NA/L)	4.70	4.20	4.50	7.40
ZINC, TOTAL (UG ZN/L)	90	40	50	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	5.	5.
CARBON DIOXIDE (MG CO2/L)	0.9	0.8	3.1	1.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.04	0.03	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.27	0.50	0.51	0.07
NITROGEN, TOTAL INORGANIC (MG N/L)	0.30	0.54	0.54	0.12
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.5	0.5	0.6
NITROGEN, TOTAL ORGANIC (MG N/L)	0.6	0.5	0.5	0.5
NITROGEN, TOTAL (MG N/L)	0.9	1.0	1.0	0.6
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	0.02	0.04	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.04	0.05	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	0.85	1.00	--
FECAL STREPTOCOCCI (LOG10(/100ML))	--	1.63	0.95	3.36
FC/FS RATIO	--	0.16	1.11	--

TABLE D-5g

PARAMETER NAME (UNITS)	STATION 19 8/14/79
PHYSICAL DATA	
MISCELLANEOUS DATA	
X-SECTION LOC (%FROM R-BK LK UPST)	50.
SAMPLE DEPTH (METERS)	1.0
FIELD MEASUREMENTS	
WATER TEMPERATURE (DEG C)	29.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	101.
OXIDATION REDUCTION POTENTIAL (MV)	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	5.9
PH (STD UNITS)	7.50
LABORATORY DATA	
COLOR (PT-CO UNITS)	33.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.20
TOTAL FILTERABLE RESIDUE (MG/L)	72.
TOTAL NONFILTERABLE RESIDUE (MG/L)	11.
CHEMICAL DATA	
MINERALS AND METALS	
ALKALINITY, TOTAL (MG CACO3/L)	37.
CHLORIDE (MG CL/L)	4.
SULFATE, TOTAL (MG SO4/L)	5.
SULFIDE, TOTAL (MG S/L)	< 0.1
CALCIUM, TOTAL (MG CA/L)	7.6
HARDNESS, TOTAL (MG CACO3/L)	58.5
IRON, DISSOLVED (UG FE/L)	100
IRON, TOTAL (UG FE/L)	680
MAGNESIUM, TOTAL (MG MG/L)	1.5
MANGANESE, DISSOLVED (UG MN/L)	< 50
MANGANESE, TOTAL (UG MN/L)	160
POTASSIUM, TOTAL (MG K/L)	1.7
SODIUM, TOTAL (MG NA/L)	6.00
ZINC, TOTAL (UG ZN/L)	110
NUTRIENTS	
CARBON, DISSOLVED ORGANIC (MG C/L)	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.
CARBON DIOXIDE (MG CO2/L)	2.2
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.07
NITROGEN, TOTAL INORGANIC (MG N/L)	0.12
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5
NITROGEN, TOTAL ORGANIC (MG N/L)	0.5
NITROGEN, TOTAL (MG N/L)	0.6
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04
BIOLOGICAL DATA	
BACTERIOLOGICAL DATA	
FECAL COLIFORM (LOG10(/100ML))	--
FECAL STREPTOCOCCI (LOG10(/100ML))	3.53
FC/FS RATIO	--

TABLE D-6a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26/1979)

WATER QUALITY SAMPLING RESULTS

Grab Samples

PARAMETER NAME (UNITS)	STATION 01 9/26/79	STATION 02 9/26/79	STATION 03 9/26/79	STATION 04 9/26/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	23.5	23.5	23.5	23.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	64.	64.	66.	72.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	8.2	8.0	8.0	8.1
PH (STD UNITS)	7.10	7.10	7.00	7.00
LABORATORY DATA				
COLOR (PT-CO UNITS)	25.	26.	27.	27.
TURBIDITY, HACH TURBIDIMETER (FTU)	3.50	5.20	5.20	5.40
TOTAL FILTERABLE RESIDUE (MG/L)	44.	38.	37.	52.
TOTAL NONFILTERABLE RESIDUE (MG/L)	7.	6.	9.	8.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	17.	17.	17.	18.
SULFATE, TOTAL (MG SO4/L)	5.	5.	5.	7.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	< 50	< 50	< 50
IRON, TOTAL (UG FE/L)	420	270	550	380
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	120
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	< 50	< 50
ZINC, TOTAL (UG ZN/L)	40	20	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	6.	6.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	6.
CARBON DIOXIDE (MG CO2/L)	2.6	2.7	3.4	3.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.04	0.05	0.03
NITROGEN, NITRATE+NITRITE (MG N/L)	0.09	0.10	0.11	0.09
NITROGEN, TOTAL INORGANIC (MG N/L)	0.12	0.14	0.16	0.12
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.03	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	2.21	2.26	2.27	1.78
FECAL STREPTOCOCCI (LOG10(/100ML))	2.87	2.97	3.02	2.58
FC/FS RATIO	0.22	0.19	0.18	0.16

TABLE D-6b

PARAMETER NAME (UNITS)	STATION 05 9/26/79	STATION 06 9/26/79	STATION 07 9/25/79	STATION 07 9/25/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	7.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	23.5	23.0	24.0	24.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	88.	78.	95.	101.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	340	420
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.6	7.5	6.2	6.2
PH (STD UNITS)	7.00	7.00	6.95	7.00
LABORATORY DATA				
COLOR (PT-CO UNITS)	34.	37.	38.	38.
TURBIDITY, HACH TURBIDIMETER (FTU)	4.20	5.30	5.00	2.80
TOTAL FILTERABLE RESIDUE (MG/L)	52.	53.	59.	43.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	< 10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	24.	20.	29.	29.
SULFATE, TOTAL (MG SO4/L)	8.	7.	6.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	< 50	100	< 50
IRON, TOTAL (UG FE/L)	410	540	280	510
MANGANESE, DISSOLVED (UG MN/L)	60	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	< 50	60	60
ZINC, TOTAL (UG ZN/L)	30	20	10	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	4.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	8.	6.	6.	6.
CARBON DIOXIDE (MG CO2/L)	4.7	4.2	6.3	5.7
NITROGEN, TOTAL AMMONIA (MG N/L)	0.09	0.04	0.08	0.11
NITROGEN, NITRATE+NITRITE (MG N/L)	0.11	0.23	0.15	0.17
NITROGEN, TOTAL INORGANIC (MG N/L)	0.20	0.27	0.23	0.28
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.03	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.15	2.15	1.00	--
FECAL STREPTOCOCCI (LOG10(/100ML))	2.52	2.69	2.65	--
FC/FS RATIO	0.04	0.29	0.02	--

TABLE D-6i

PARAMETER NAME (UNITS)	STATION 08 9/25/79	STATION 09 9/25/79	STATION 09 9/25/79	STATION 10 9/25/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	4.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	24.0	23.5	24.0	23.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	92.	88.	87.	85.
OXIDATION REDUCTION POTENTIAL (MV)	430	580	570	490
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.8	5.9	5.8	6.0
PH (STD UNITS)	7.00	6.85	6.80	6.95
LABORATORY DATA				
COLOR (PT-CO UNITS)	38.	70.	55.	55.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.00	25.00	25.00	28.00
TOTAL FILTERABLE RESIDUE (MG/L)	51.	59.	57.	60.
TOTAL NONFILTERABLE RESIDUE (MG/L)	13.	30.	30.	34.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	26.	23.	23.	22.
SULFATE, TOTAL (MG SO4/L)	6.	8.	7.	7.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	60	50	50
IRON, TOTAL (UG FE/L)	590	1990	1900	2030
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	130	120	130
ZINC, TOTAL (UG ZN/L)	20	40	60	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	4.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	6.	7.
CARBON DIOXIDE (MG CO2/L)	5.3	6.3	7.0	4.7
NITROGEN, TOTAL AMMONIA (MG N/L)	0.14	0.10	0.09	0.09
NITROGEN, NITRATE+NITRITE (MG N/L)	0.12	0.08	0.08	0.08
NITROGEN, TOTAL INORGANIC (MG N/L)	0.26	0.18	0.17	0.17
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.03	0.03	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.11	0.48	--	1.00
FECAL STREPTOCOCCI (LOG10(/100ML))	2.68	3.15	--	3.43
FC/FS RATIO	0.03	<0.01	--	<0.01

TABLE D-6d

PARAMETER NAME (UNITS)	STATION 10 9/25/79	STATION 11 9/25/79	STATION 11 9/25/79	STATION 12 9/24/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-9K LK UPST)	50.	75.	75.	50.
SAMPLE DEPTH (METERS)	6.0	1.0	5.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	24.0	23.5	23.0	23.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	90.	93.	94.	95.
OXIDATION REDUCTION POTENTIAL (MV)	480	450	440	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	5.8	6.8	6.8	7.7
PH (STD UNITS)	6.80	7.10	7.10	7.35
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	50.	60.	12.
TURBIDITY, HACH TURBIDIMETER (FTU)	31.00	18.00	22.00	<1.00
TOTAL FILTERABLE RESIDUE (MG/L)	54.	59.	60.	63.
TOTAL NONFILTERABLE RESIDUE (MG/L)	35.	22.	26.	< 2.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	22.	28.	26.	38.
SULFATE, TOTAL (MG SO4/L)	8.	6.	7.	3.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	50	50	< 50	< 50
IRON, TOTAL (UG FE/L)	900	1530	1450	250
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	130	90	90	< 50
ZINC, TOTAL (UG ZN/L)	60	60	40	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	5.	5.	7.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	7.	7.
CARBON DIOXIDE (MG CO2/L)	6.7	4.3	4.1	3.4
NITROGEN, TOTAL AMMONIA (MG N/L)	0.13	0.06	0.07	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.09	0.13	0.12	<0.01
NITROGEN, TOTAL INORGANIC (MG N/L)	0.22	0.19	0.19	<0.03
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.06	0.06	0.01
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	0.00	--	0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	--	2.68	--	1.80
FC/FS RATIO	--	<0.01	--	0.02

TABLE D-6e

PARAMETER NAME (UNITS)	STATION 13 9/24/79	STATION 13 9/24/79	STATION 14 9/24/79	STATION 15 9/24/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (XFROM P-BK LK UPST)	30.	30.	50.	50.
SAMPLE DEPTH (METERS)	1.0	8.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	25.0	25.0	23.0	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	150.	155.	208.	153.
OXIDATION REDUCTION POTENTIAL (MV)	450	480	--	430
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.1	7.0	7.6	7.3
PH (STD UNITS)	7.70	7.60	7.70	7.70
LABORATORY DATA				
COLOR (PT-CO UNITS)	18.	18.	12.	17.
TURBIDITY, HACH TURBIDIMETER (FTU)	8.10	6.80	4.40	5.70
TOTAL FILTERABLE RESIDUE (MG/L)	90.	90.	113.	94.
TOTAL NONFILTERABLE RESIDUE (MG/L)	13.	15.	8.	10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	59.	59.	95.	60.
SULFATE, TOTAL (MG SO4/L)	3.	4.	< 1.	3.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	< 50	< 50	< 50
IRON, TOTAL (UG FE/L)	880	490	350	680
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	80	80	< 50	60
ZINC, TOTAL (UG ZN/L)	40	40	40	60
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	4.	7.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	7.	5.
CARBON DIOXIDE (MG CO2/L)	2.3	2.9	3.8	2.3
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.05	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.45	0.45	0.48	0.58
NITROGEN, TOTAL INORGANIC (MG N/L)	0.49	0.50	0.50	0.60
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.01	<0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.05	0.02	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.48	--	1.18	0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	1.51	--	1.41	1.18
FC/FS RATIO	0.09	--	0.58	0.07

TABLE D-6f

PARAMETER NAME (UNITS)	STATION 15 9/24/79	STATION 16 9/24/79	STATION 17 9/24/79	STATION 18 9/25/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	4.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	24.0	24.0	24.0	23.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	156.	131.	120.	122.
OXIDATION REDUCTION POTENTIAL (MV)	500	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	7.4	6.8	6.9	6.6
PH (STD UNITS)	7.70	7.60	7.35	7.30
LABORATORY DATA				
COLOR (PT-CO UNITS)	21.	24.	31.	38.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.60	5.50	3.90	9.10
TOTAL FILTERABLE RESIDUE (MG/L)	94.	79.	78.	72.
TOTAL NONFILTERABLE RESIDUE (MG/L)	12.	7.	6.	22.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	65.	45.	42.	44.
SULFATE, TOTAL (MG SO4/L)	3.	4.	3.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	90	180	< 50
IRON, TOTAL (UG FE/L)	670	730	730	1080
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	50	< 50	80
ZINC, TOTAL (UG ZN/L)	40	30	40	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	4.	4.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	5.	6.
CARBON DIOXIDE (MG CO2/L)	2.5	2.2	3.7	4.3
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.12	0.07	0.10
NITROGEN, NITRATE+NITRITE (MG N/L)	0.57	0.65	0.61	0.23
NITROGEN, TOTAL INORGANIC (MG N/L)	0.60	0.77	0.68	0.33
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	0.04	0.03	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.06	0.05	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	--	1.00	1.52	0.85
FECAL STREPTOCOCCI (LOG10(/100ML))	--	1.72	1.58	3.53
FC/FS RATIO	--	0.19	0.87	<0.01

TABLE D-6g

PARAMETER NAME (UNITS)	STATION 19 9/25/79
PHYSICAL DATA	
MISCELLANEOUS DATA	
X-SECTION LOC (%FROM R-BK LK UPST)	50.
SAMPLE DEPTH (METERS)	1.0
FIELD MEASUREMENTS	
WATER TEMPERATURE (DEG C)	24.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	122.
OXIDATION REDUCTION POTENTIAL (MV)	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	6.0
PH (STD UNITS)	7.20
LABORATORY DATA	
COLOR (PT-CO UNITS)	35.
TURBIDITY, HACH TURBIDIMETER (FTU)	10.00
TOTAL FILTERABLE RESIDUE (MG/L)	77.
TOTAL NONFILTERABLE RESIDUE (MG/L)	17.
CHEMICAL DATA	
MINERALS AND METALS	
ALKALINITY, TOTAL (MG CACO3/L)	45.
SULFATE, TOTAL (MG SO4/L)	4.
SULFIDE, TOTAL (MG S/L)	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50
IRON, TOTAL (UG FE/L)	1090
MANGANESE, DISSOLVED (UG MN/L)	< 50
MANGANESE, TOTAL (UG MN/L)	90
ZINC, TOTAL (UG ZN/L)	30
NUTRIENTS	
CARBON, DISSOLVED ORGANIC (MG C/L)	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.
CARBON DIOXIDE (MG CO2/L)	5.6
NITROGEN, TOTAL AMMONIA (MG N/L)	0.08
NITROGEN, NITRATE+NITRITE (MG N/L)	0.28
NITROGEN, TOTAL INORGANIC (MG N/L)	0.36
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05
BIOLOGICAL DATA	
BACTERIOLOGICAL DATA	
FECAL COLIFORM (LOG10(/100ML))	0.30
FECAL STREPTOCOCCI (LOG10(/100ML))	3.68
FC/FS RATIO	<0.01

TABLE D-7a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-8/1979)

WATER QUALITY SAMPLING RESULTS

Grab Samples

PARAMETER NAME (UNITS)	STATION 01 12/ 5/79	STATION 02 12/ 5/79	STATION 03 12/ 5/79	STATION 04 12/ 5/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	11.5	12.0	12.0	12.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	70.	69.	69.	74.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.9	10.7	10.6	10.5
PH (STD UNITS)	7.20	7.10	7.35	7.30
LABORATORY DATA				
COLOR (PT-CO UNITS)	18.	20.	20.	22.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.30	6.80	7.00	7.70
TOTAL FILTERABLE RESIDUE (MG/L)	51.	57.	55.	62.
TOTAL NONFILTERABLE RESIDUE (MG/L)	13.	11.	12.	13.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	16.	15.	16.	17.
CHLORIDE (MG CL/L)	4.	5.	5.	5.
SULFATE, TOTAL (MG SO4/L)	6.	6.	7.	8.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	2.6	3.2	2.9	2.8
HARDNESS, TOTAL (MG CACO3/L)	13.6	19.2	20.0	18.9
IRON, DISSOLVED (UG FE/L)	< 50	< 50	60	60
IRON, TOTAL (UG FE/L)	570	610	750	430
MAGNESIUM, TOTAL (MG MG/L)	1.2	1.0	1.2	1.3
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	< 50	60
POTASSIUM, TOTAL (MG K/L)	2.1	2.4	2.2	2.3
SODIUM, TOTAL (MG NA/L)	5.90	4.50	4.40	6.70
ZINC, TOTAL (UG ZN/L)	20	70	20	< 10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	< 6.	6.	< 6.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	6.	6.
CARBON DIOXIDE (MG CO2/L)	2.4	2.8	1.7	2.0
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.04	0.03	0.03
NITROGEN, NITRATE+NITRITE (MG N/L)	0.35	0.34	0.35	0.38
NITROGEN, TOTAL INORGANIC (MG N/L)	0.39	0.38	0.38	0.41
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.3	0.4	0.3	0.4
NITROGEN, TOTAL ORGANIC (MG N/L)	0.3	0.3	0.3	0.4
NITROGEN, TOTAL (MG N/L)	0.7	0.7	0.7	0.8
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.02	0.04	0.06
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.43	1.46	1.56	1.49
FECAL STREPTOCOCCI (LOG10(/100ML))	--	--	--	--
FC/FS RATIO	--	--	--	--

TABLE D-7b

PARAMETER NAME (UNITS)	STATION 05 12/ 5/79	STATION 06 12/ 6/79	STATION 07 12/ 6/79	STATION 08 12/ 6/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	12.0	12.0	13.0	12.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	66.	76.	74.	81.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	440	460
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.2	10.7	10.2	10.2
PH (STD UNITS)	7.25	7.15	7.30	7.40
LABORATORY DATA				
COLOR (PT-CO UNITS)	27.	23.	26.	26.
TURBIDITY, HACH TURBIDIMETER (FTU)	8.80	6.80	8.20	8.50
TOTAL FILTERABLE RESIDUE (MG/L)	62.	61.	65.	65.
TOTAL NONFILTERABLE RESIDUE (MG/L)	13.	11.	11.	14.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	18.	19.	18.	18.
CHLORIDE (MG CL/L)	5.	4.	5.	5.
SULFATE, TOTAL (MG SO4/L)	10.	8.	9.	9.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	2.4	2.9	5.5	2.3
HARDNESS, TOTAL (MG CACO3/L)	19.2	20.9	20.7	20.0
IRON, DISSOLVED (UG FE/L)	< 50	< 50	< 50	60
IRON, TOTAL (UG FE/L)	610	610	710	380
MAGNESIUM, TOTAL (MG MG/L)	1.3	1.4	1.0	1.1
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	< 50	< 50	< 50
POTASSIUM, TOTAL (MG K/L)	2.2	2.1	2.1	2.1
SODIUM, TOTAL (MG NA/L)	7.00	6.50	7.20	5.80
ZINC, TOTAL (UG ZN/L)	10	20	< 10	< 10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	6.	6.	6.
CARBON, TOTAL ORGANIC (MG C/L)	7.	7.	6.	7.
CARBON DIOXIDE (MG CO2/L)	2.5	3.2	2.1	1.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.05	0.03	0.03
NITROGEN, NITRATE+NITRITE (MG N/L)	0.32	0.41	0.31	0.32
NITROGEN, TOTAL INORGANIC (MG N/L)	0.34	0.46	0.34	0.35
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.4	0.2	0.3	0.2
NITROGEN, TOTAL ORGANIC (MG N/L)	0.4	0.2	0.2	0.2
NITROGEN, TOTAL (MG N/L)	0.8	0.6	0.6	0.5
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.04	0.03	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.60	0.00	1.90	1.48
FECAL STREPTOCOCCI (LOG10(/100ML))	--	2.30	2.41	2.32
FC/FS RATIO	--	<0.03	0.31	0.14

TABLE D-7c

PARAMETER NAME (UNITS)	STATION 09 12/ 6/79	STATION 10 12/ 6/79	STATION 11 12/ 5/79	STATION 12 12/ 6/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	80.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	12.5	12.5	12.0	11.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	79.	78.	66.	102.
OXIDATION REDUCTION POTENTIAL (MV)	410	490	530	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	10.3	10.0	10.2	10.2
PH (STD UNITS)	7.00	7.00	7.45	7.10
LABORATORY DATA				
COLOR (PT-CO UNITS)	30.	30.	26.	12.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.30	8.60	8.80	1.70
TOTAL FILTERABLE RESIDUE (MG/L)	70.	64.	64.	68.
TOTAL NONFILTERABLE RESIDUE (MG/L)	14.	12.	13.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	20.	19.	22.	44.
CHLORIDE (MG CL/L)	3.	4.	5.	3.
SULFATE, TOTAL (MG SO4/L)	9.	8.	8.	1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	2.3	3.2	3.6	18.0
HARDNESS, TOTAL (MG CACO3/L)	21.9	21.9	25.5	50.9
IRON, DISSOLVED (UG FE/L)	< 50	< 50	< 50	50
IRON, TOTAL (UG FE/L)	880	740	860	220
MAGNESIUM, TOTAL (MG MG/L)	1.1	1.4	1.2	0.8
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	70	50	70
POTASSIUM, TOTAL (MG K/L)	2.3	2.1	1.9	0.8
SODIUM, TOTAL (MG NA/L)	5.70	6.90	5.80	3.60
ZINC, TOTAL (UG ZN/L)	40	20	20	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	7.	6.	7.
CARBON, TOTAL ORGANIC (MG C/L)	7.	7.	7.	8.
CARBON DIOXIDE (MG CO2/L)	4.8	4.5	1.8	8.6
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05	0.04	0.04	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.32	0.31	0.31	0.04
NITROGEN, TOTAL INORGANIC (MG N/L)	0.37	0.35	0.35	0.06
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.3	0.3	0.4	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	0.2	0.2	0.4	0.3
NITROGEN, TOTAL (MG N/L)	0.6	0.6	0.7	0.3
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.03	0.06	0.01
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	<0.00	0.95	1.41	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	1.81	1.49	--	1.20
FC/FS RATIO	<0.03	0.29	--	<0.06

TABLE D-7d

PARAMETER NAME (UNITS)	STATION 13 12/ 6/79	STATION 14 12/ 3/79	STATION 15 12/ 3/79	STATION 16 12/ 3/79
PHYSICAL DATA				
MISCELLANEOUS DATA				
X-SECTION LOC (%FROM R-BK LK UPST)	30.	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0	1.0
FIELD MEASUREMENTS				
WATER TEMPERATURE (DEG C)	12.5	11.0	12.5	12.0
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	131.	198.	98.	97.
OXIDATION REDUCTION POTENTIAL (MV)	580	--	590	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.6	10.2	8.6	9.0
PH (STD UNITS)	7.30	7.50	7.10	6.90
LABORATORY DATA				
COLOR (PT-CO UNITS)	20.	9.	35.	55.
TURBIDITY, HACH TURBIDIMETER (FTU)	4.00	3.30	6.20	6.30
TOTAL FILTERABLE RESIDUE (MG/L)	90.	126.	82.	82.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	< 10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	60.	100.	40.	35.
CHLORIDE (MG CL/L)	4.	3.	5.	5.
SULFATE, TOTAL (MG SO4/L)	2.	4.	3.	3.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	12.7	35.0	10.4	7.2
HARDNESS, TOTAL (MG CACO3/L)	67.0	112.0	44.0	43.6
IRON, DISSOLVED (UG FE/L)	< 50	< 50	320	500
IRON, TOTAL (UG FE/L)	750	250	1290	1220
MAGNESIUM, TOTAL (MG MG/L)	1.1	0.6	1.2	1.0
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	60	< 50	60	< 50
POTASSIUM, TOTAL (MG K/L)	1.3	1.0	1.6	1.6
SODIUM, TOTAL (MG NA/L)	3.70	4.80	4.10	3.30
ZINC, TOTAL (UG ZN/L)	30	20	40	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	< 5.	< 5.	6.	6.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	6.	6.
CARBON DIOXIDE (MG CO2/L)	7.0	8.0	7.7	10.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.09	0.02	0.08	0.09
NITROGEN, NITRATE+NITRITE (MG N/L)	0.55	0.50	0.46	0.42
NITROGEN, TOTAL INORGANIC (MG N/L)	0.64	0.52	0.54	0.51
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.2	0.2	0.3	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	< 0.1	0.1	0.2	0.2
NITROGEN, TOTAL (MG N/L)	0.7	0.7	0.7	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	<0.01	0.06	0.03
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.01	0.06	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.00	1.28	1.00	1.92
FECAL STREPTOCOCCI (LOG10(/100ML))	--	--	--	--
FC/FS RATIO	--	--	--	--

TABLE D-7e

PARAMETER NAME (UNITS)	STATION 17 12/ 3/79	STATION 18 12/ 4/79	STATION 19 12/ 4/79
PHYSICAL DATA			
MISCELLANEOUS DATA			
X-SECTION LOC (%FROM R-BK LK UPST)	50.	50.	50.
SAMPLE DEPTH (METERS)	1.0	1.0	1.0
FIELD MEASUREMENTS			
WATER TEMPERATURE (DEG C)	12.0	11.5	11.5
SPEC CONDUCTANCE, FLD (UMHO/CM 25C)	96.	108.	102.
OXIDATION REDUCTION POTENTIAL (MV)	--	--	--
DISSOLVED OXYGEN, ELECTRODE (MG/L)	9.3	9.8	9.5
PH (STD UNITS)	6.80	7.00	7.00
LABORATORY DATA			
COLOR (PT-CO UNITS)	50.	26.	25.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.90	9.50	9.30
TOTAL FILTERABLE RESIDUE (MG/L)	78.	70.	71.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	18.	14.
CHEMICAL DATA			
MINERALS AND METALS			
ALKALINITY, TOTAL (MG CACO3/L)	35.	37.	35.
CHLORIDE (MG CL/L)	5.	4.	4.
SULFATE, TOTAL (MG SO4/L)	2.	5.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	7.2	8.7	7.5
HARDNESS, TOTAL (MG CACO3/L)	41.1	36.2	37.2
IRON, DISSOLVED (UG FE/L)	500	80	90
IRON, TOTAL (UG FE/L)	1290	1130	1070
MAGNESIUM, TOTAL (MG MG/L)	0.9	1.3	1.3
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	60	60
POTASSIUM, TOTAL (MG K/L)	1.9	2.0	1.9
SODIUM, TOTAL (MG NA/L)	3.20	4.70	4.30
ZINC, TOTAL (UG ZN/L)	20	30	40
NUTRIENTS			
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	5.
CARBON DIOXIDE (MG CO2/L)	13.6	9.4	8.8
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05	0.09	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.44	0.39	0.37
NITROGEN, TOTAL INORGANIC (MG N/L)	0.49	0.48	0.39
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.2	0.3	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	0.1	0.2	0.3
NITROGEN, TOTAL (MG N/L)	0.6	0.7	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	<0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.04
BIOLOGICAL DATA			
BACTERIOLOGICAL DATA			
FECAL COLIFORM (LOG10(/100ML))	1.94	1.43	1.18
FECAL STREPTOCOCCI (LOG10(/100ML))	--	--	--
FC/FS RATIO	--	--	--

TABLE D-8

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 1

Parameter Name (Units)	Station A0 2/21/79	Station B0 2/21/79	Station B1 2/22/79	Station B2 2/20/79	Station Fe 2/20/79
Meteorological Data					
Air Temperature (^{o}C)	20.0	20.0			15.0
Cloud Cover (Percent)	100	100			100
Wind Velocity (MPH)	0.0	0.0			5.0
Wind Direction (Deg Fm True N, CW)	---	---			70
Hydrological Data					
Total Depth (Meters)	5.0				
Wave Height (Meters)	0.10	0.0			0.01
Curring Speed (fps)	3.0	3.0			
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5			
Secchi Disk Transparency (Meters)	0.7	0.7			0.6
Depth of 1% Surface Light (Meters)	1.8	1.5			1.5
Field Measurements					
Sample Depth (Meters)	1.0	1.0	0.3	0.3	1.0
Water Temperature (^{o}C)	8.0	8.0			9.0
Spec. Conductance, Fld. (μmho/cm 25C)	58	74			79
Oxidation Reduction Potential (mV)	320	170			330
Dissolved Oxygen, Electrode (mg/l)	12.8	12.9			11.2
pH (STD Units)	6.8	7.2			7.4
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	7.6	9.6			4.9
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))			0.0	1.70	
Fecal Streptococci (Log 10 (/100 ml))			1.20	0.30	
FC/FS Ratio			<0.06	24.50	

TABLE D-9

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 2

Parameter Name (Units)	Station A0 4/4/79	Station B0 4/4/79	Station B1	Station B2	Station Fe 4/2/79
Meteorological Data					
Air Temperature (^{o}C)	25.0	22.0			22.0
Cloud Cover (Percent)	100	100			100
Wind Velocity (MPH)	0.0	0.0			7.0
Wind Direction (Deg Fm True N, CW)	---	---			160
Hydrological Data					
Total Depth (Meters)	6.0	3.0			2.5
Wave Height (Meters)	0.1	0.1			0.02
Current Speed (fps)	3.5	2.5			
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5			30
Secchi Disk Transparency (Meters)	0.3	0.6			0.6
Depth of 1% Surface Light (Meters)	0.9	1.5			1.2
Field Measurements					
Sample Depth (Meters)	1.0	1.0			1.0
Water Temperature (^{o}C)	15.0	15.0			18.0
Spec. Conductance, Fld. (μmho/cm 25C)	54	60			78
Oxidation Reduction Potential (mV)	390	350			400
Dissolved Oxygen, Electrode (mg/1)	9.9	10.3			9.2
pH (STD Units)	7.0	7.1			7.2
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	32.1	16.1			10.4
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))					
Fecal Streptococci (Log 10 (/100 ml))					
FC/FS Ratio					

TABLE D-10

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 3

Parameter Name (Units)	Station A0 6/6/79	Station B0 6/6/79	Station B1 6/4/79	Station B2 6/4/79	Station Fe 6/5/79
Meteorological Data					
Air Temperature (°C)	31.0	30.0			29.0
Cloud Cover (Percent)	100	50			50
Wind Velocity (MPH)	3.5	0.0			5.0
Wind Direction (Deg Fm True N, CW)	180	---			340
Hydrological Data					
Total Depth (Meters)	4.0	3.0	1.5	2.0	2.0
Wave Height (Meters)	0.1	0.05			0.1
Current Speed (fps)	2.5	2.0			0.0
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5	10	5	
Secchi Disk Transparency (Meters)	0.65	0.6			0.6
Depth of 1% Surface Light (Meters)	1.8	1.5			1.5
Field Measurements					
Sample Depth (Meters)	1.0	1.0	0.3	0.3	1.0
Water Temperature (°C)	24.0	24.0			26.0
Spec. Conductance, Fld. (μmho/cm 25C)	51	153			63.7
Oxidation Reduction Potential (mV)	335	153			445
Dissolved Oxygen, Electrode (mg/l)	8.5	7.3			8.2
pH (STD Units)	6.9	6.8			7.4
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	16.6	21.6			20.6
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))			0.70	0.90	
Fecal Streptococci (Log 10 (/100 ml))			<0.00	1.60	
FC/FS Ratio			>5.0	0.21	

TABLE D-11

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 4

Parameter Name (Units)	Station A0 7/19/79	Station B0 7/18/79	Station B1 7/16/79	Station B2 7/16/79	Station Fe 7/17/79
Meteorological Data					
Air Temperature (^{o}C)	35.0	28.0			35.0
Cloud Cover (Percent)	30	100			10
Wind Velocity (MPH)	6.0	0.0			0.0
Wind Direction (Deg Fm True N, CW)	2	---			---
Hydrological Data					
Total Depth (Meters)	2.0		2.0	3.0	2.0
Wave Height (Meters)	0.0	0.0			0.0
Current Speed (fps)	1.0	2.0			0.0
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5	90	5	30
Secchi Disk Transparency (Meters)					0.65
Depth of 1% Surface Light (Meters)	2.4	0.4			1.4
Field Measurements					
Sample Depth (Meters)	1.0	1.0	0.3	0.3	1.0
Water Temperature (^{o}C)	29	28.5			29
Spec. Conductance, Fld. (μmho/cm 25C)	60	381			78
Oxidation Reduction Potential (mV)	470	6			
Dissolved Oxygen, Electrode (mg/l)	6.7	5.9			7.6
pH (STD Units)	7.0	7.2			
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	8.3	19.6			9.6
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))			0.78	0.00	
Fecal Streptococci (Log 10 (/100 ml))			0.60	0.70	
FC/FS Ratio			1.5	0.2	

TABLE D-12

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 5

Parameter Name (Units)	Station A0 8/15/79	Station B0 8/15/79	Station B1 8/16/79	Station B2 8/13/79	Station Fe 8/14/79
Meteorological Data					
Air Temperature (^{o}C)	32.0	32.0			31.5
Cloud Cover (Percent)	70	50			50
Wind Velocity (MPH)	4.0	0.0			5.0
Wind Direction (Deg Fm True N, CW)	340	---			300
Hydrological Data					
Total Depth (Meters)	3.0	2.0	2.0	2.0	2.0
Wave Height (Meters)					
Current Speed (fps)	1.0	0.5			0.0
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5	90	5	40
Secchi Disk Transparency (Meters)	1.2	1.1			0.7
Depth of 1% Surface Light (Meters)	2.8	3.1			1.3
Field Measurements					
Sample Depth (Meters)	1.0	1.0	0.3	0.3	1.0
Water Temperature (^{o}C)	28	29			28
Spec. Conductance, Fld. (µmho/cm 25C)	73	75			87
Oxidation Reduction Potential (mV)	477	512			464
Dissolved Oxygen, Electrode (mg/l)	7.8	7.8			5.6
pH (STD Units)	7.09	8.3			7.3
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	3.1	2.3			7.5
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))			0.0	<0.0	
Fecal Streptococci (Log 10 (/100 ml))			0.48	1.23	
FC/FS Ratio			0.33	<0.06	

TABLE D-13

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 6

Parameter Name (Units)	Station A0 9/25/79	Station B0 9/26/79	Station B1 9/25/79	Station B2 9/24/79	Station Fe 9/25/79
Meteorological Data					
Air Temperature (^{o}C)	21.5	21.0			21.0
Cloud Cover (Percent)	100	100			100
Wind Velocity (MPH)	2.5	5.0			10.0
Wind Direction (Deg Fm True N, CW)	10	10			40
Hydrological Data					
Total Depth (Meters)	2.0	5.0	1.5	2.0	3.0
Wave Height (Meters)	0.0	0.05			0.20
Current Speed (fps)	1.0	1.0			0.0
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5	95	5	50
Secchi Disk Transparency (Meters)	1.0	1.0			0.5
Depth of 1% Surface Light (Meters)	2.4	2.3			1.2
Field Measurements					
Sample Depth (Meters)	1.0	1.0	0.3	0.3	1.0
Water Temperature (^{o}C)	23.5	23.5			24.0
Spec. Conductance, Fld. (μmho/cm 25C)	64	72			87
Oxidation Reduction Potential (mV)	430	560			600
Dissolved Oxygen, Electrode (mg/l)	8.2	8.1			6.0
pH (STD Units)	7.0	6.95			6.5
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	3.6	4.6			15.6
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))			<0.0	0.30	
Fecal Streptococci (Log 10 (/100 ml))			1.72	2.04	
FC/FS Ratio			<0.02	0.02	

TABLE D-14

WATER QUALITY SAMPLING RESULTS
SPECIAL STATIONS, PHASE II, CYCLE 7

Parameter Name (Units)	Station A0 12/5/79	Station B0 12/5/79	Station B1	Station B2	Station Fe 12/6/79
Meteorological Data					
Air Temperature (^{o}C)	16.0	11.0			15.0
Cloud Cover (Percent)	20	10			100
Wind Velocity (MPH)	0.0	4.0			6.0
Wind Direction (Deg Fm True N, CW)	---	120			300
Hydrological Data					
Total Depth (Meters)	2.0	2.0			2.0
Wave Height (Meters)	0.0	0.0			0.1
Current Speed (fps)	3.0	3.0			0.0
Physical Data					
X-Section Loc (% From R-BK LK Upst)	95	5			50
Secchi Disk Transparency (Meters)	0.85	0.7			0.7
Depth of 1% Surface Light (Meters)	2.0	1.7			2.0
Field Measurements					
Sample Depth (Meters)	1.0	1.0			1.0
Water Temperature (^{o}C)	15.0	12.0			12.5
Spec. Conductance, Fld. (μmho/cm 25C)	72	101			85
Oxidation Reduction Potential (mV)	497	544			485
Dissolved Oxygen, Electrode (mg/l)	9.7	9.8			10.0
pH (STD Units)	6.71	6.85			7.13
Laboratory Data					
Turbidity, Hach Turbidimeter (FTU)	[illegible].3	7.5			8.5
Bacteriological Data					
Fecal Coliform (Log 10 (/100 ml))					
Fecal Streptococci (Log 10 (/100 ml))					
FC/FS Ratio					

TABLE D-15a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 2/21/79	STATION 02 2/21/79	STATION 03 2/21/79	STATION 04 2/21/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	80.	80.	100.	80.
BIOMASS, PLANKTON (GM/CU M)	3.	3.	2.	2.
CHLOROPHYLL-A (UG/L)	11.9	13.4	13.4	10.5
CHLOROPHYLL-B (UG/L)	1.3	2.9	0.3	1.0
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	0.2	< 0.1

PARAMETER NAME (UNITS)	STATION 05 2/21/79	STATION 06 2/21/79	STATION 07 2/20/79	STATION 08 2/20/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	90.	60.	50.	80.
BIOMASS, PLANKTON (GM/CU M)	4.	3.	< 1.	3.
CHLOROPHYLL-A (UG/L)	14.0	4.2	12.9	15.4
CHLOROPHYLL-B (UG/L)	1.2	0.8	1.1	0.6
CHLOROPHYLL-C (UG/L)	0.2	0.2	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 09 2/20/79	STATION 10 2/20/79	STATION 11 2/20/79	STATION 12 2/22/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	50.	140.	60.	70.
BIOMASS, PLANKTON (GM/CU M)	3.	3.	2.	< 1.
CHLOROPHYLL-A (UG/L)	20.8	20.4	12.7	6.1
CHLOROPHYLL-B (UG/L)	1.3	1.5	0.5	1.0
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 13 2/19/79	STATION 14 2/22/79	STATION 15 2/19/79	STATION 16 2/19/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	< 30.	< 20.	< 30.	< 50.
BIOMASS, PLANKTON (GM/CU M)	1.	1.	1.	3.
CHLOROPHYLL-A (UG/L)	0.8	2.1	2.1	1.2
CHLOROPHYLL-B (UG/L)	0.4	0.4	1.2	0.6
CHLOROPHYLL-C (UG/L)	< 0.1	0.1	0.2	< 0.1

TABLE D-15b

PARAMETER NAME (UNITS)	STATION 17 2/19/79	STATION 18 2/20/79	STATION 19 2/20/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	< 50.	60.	70.
BIOMASS, PLANKTON (GM/CU M)	2.	3.	3.
CHLOROPHYLL-A (UG/L)	1.3	11.3	12.0
CHLOROPHYLL-B (UG/L)	0.2	0.7	1.7
CHLOROPHYLL-C (UG/L)	< 0.1	0.2	< 0.1

TABLE D-16a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 2 (4/2-4/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 4/ 4/79	STATION 02 4/ 4/79	STATION 03 4/ 4/79	STATION 04 4/ 4/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	100.	80.	100.	80.
BIOMASS. PLANKTON (GM/CU M)	8.	8.	8.	4.
CHLOROPHYLL-A (UG/L)	10.8	10.2	10.6	9.9
CHLOROPHYLL-B (UG/L)	0.3	0.2	0.4	0.2
CHLOROPHYLL-C (UG/L)	0.1	< 0.1	0.2	< 0.1

PARAMETER NAME (UNITS)	STATION 05 4/ 4/79	STATION 06 4/ 4/79	STATION 07 4/ 3/79	STATION 08 4/ 3/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	70.	60.	50.	140.
BIOMASS. PLANKTON (GM/CU M)	6.	3.	3.	3.
CHLOROPHYLL-A (UG/L)	9.1	8.2	15.5	16.1
CHLOROPHYLL-B (UG/L)	1.0	1.4	1.4	1.1
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	0.2	0.2

PARAMETER NAME (UNITS)	STATION 09 4/ 3/79	STATION 10 4/ 2/79	STATION 11 4/ 3/79	STATION 13 4/ 2/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	90.	120.	150.	80.
BIOMASS. PLANKTON (GM/CU M)	3.	4.	3.	3.
CHLOROPHYLL-A (UG/L)	26.7	23.7	26.6	14.9
CHLOROPHYLL-B (UG/L)	2.2	2.1	1.1	1.1
CHLOROPHYLL-C (UG/L)	0.4	0.3	0.7	0.3

PARAMETER NAME (UNITS)	STATION 14 4/ 2/79	STATION 15 4/ 2/79	STATION 16 4/ 2/79	STATION 17 4/ 2/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	30.	50.	20.	< 20.
BIOMASS. PLANKTON (GM/CU M)	2.	3.	1.	2.
CHLOROPHYLL-A (UG/L)	2.5	10.9	1.6	2.4
CHLOROPHYLL-B (UG/L)	0.4	1.0	0.2	0.3
CHLOROPHYLL-C (UG/L)	< 0.1	0.1	< 0.1	< 0.1

TABLE D-16b

PARAMETER NAME (UNITS)	STATION 13 4/ 3/79	STATION 19 4/ 3/79
BIOMASS MEASUREMENTS		
EUPHOTIC ZONE		
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	120.	110.
BIOMASS, PLANKTON (GM/CU M)	2.	3.
CHLOROPHYLL-A (UG/L)	14.6	13.9
CHLOROPHYLL-B (UG/L)	0.3	0.4
CHLOROPHYLL-C (UG/L)	0.1	0.1

TABLE D-17a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 6/ 6/79	STATION 02 6/ 6/79	STATION 03 6/ 6/79	STATION 04 6/ 6/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	170.	90.	70.	110.
BIOMASS, PLANKTON (GM/CU M)	< 1.	4.	3.	2.
CHLOROPHYLL-A (UG/L)	2.8	2.4	3.3	3.3
CHLOROPHYLL-B (UG/L)	0.4	0.5	< 0.1	< 0.1
CHLOROPHYLL-C (UG/L)	< 0.1	0.2	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 05 6/ 6/79	STATION 06 6/ 6/79	STATION 07 6/ 5/79	STATION 08 6/ 5/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	30.	50.	40.	70.
BIOMASS, PLANKTON (GM/CU M)	2.	1.	< 1.	1.
CHLOROPHYLL-A (UG/L)	2.9	3.2	5.8	5.1
CHLOROPHYLL-B (UG/L)	< 0.1	0.2	0.7	0.2
CHLOROPHYLL-C (UG/L)	< 0.1	0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 09 6/ 5/79	STATION 10 6/ 5/79	STATION 11 6/ 5/79	STATION 12 6/ 6/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	110.	90.	100.	40.
BIOMASS, PLANKTON (GM/CU M)	5.	5.	2.	1.
CHLOROPHYLL-A (UG/L)	18.1	13.7	9.6	1.4
CHLOROPHYLL-B (UG/L)	1.3	0.9	1.4	0.2
CHLOROPHYLL-C (UG/L)	0.6	0.5	0.4	< 0.1

PARAMETER NAME (UNITS)	STATION 13 6/ 4/79	STATION 14 6/ 4/79	STATION 15 6/ 4/79	STATION 16 6/ 4/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	140.	80.	100.	< 30.
BIOMASS, PLANKTON (GM/CU M)	< 1.	2.	1.	1.
CHLOROPHYLL-A (UG/L)	10.8	5.5	14.9	1.9
CHLOROPHYLL-B (UG/L)	1.3	0.7	1.5	0.4
CHLOROPHYLL-C (UG/L)	0.5	0.5	1.1	0.2

TABLE D-17b

PARAMETER NAME (UNITS)	STATION 17 6/ 4/79	STATION 18 6/ 5/79	STATION 19 6/ 5/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	< 30.	90.	730.
BIOMASS, PLANKTON (GM/CU M)	1.	2.	< 1.
CHLOROPHYLL-A (UG/L)	1.4	9.1	8.3
CHLOROPHYLL-B (UG/L)	0.2	0.4	0.1
CHLOROPHYLL-C (UG/L)	0.1	0.3	< 0.1

TABLE D-18a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 7/19/79	STATION 02 7/19/79	STATION 03 7/18/79	STATION 04 7/18/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	120.	90.	140.	90.
BIOMASS, PLANKTON (GM/CU M)	7.	7.	8.	20.
CHLOROPHYLL-A (UG/L)	14.1	12.8	13.9	12.7
CHLOROPHYLL-B (UG/L)	0.6	< 0.5	0.1	0.9
CHLOROPHYLL-C (UG/L)	0.1	< 0.3	< 0.1	0.8

PARAMETER NAME (UNITS)	STATION 05 7/18/79	STATION 06 7/18/79	STATION 07 7/18/79	STATION 08 7/17/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	<100.	150.	120.	< 60.
BIOMASS, PLANKTON (GM/CU M)	26.	6.	7.	8.
CHLOROPHYLL-A (UG/L)	14.4	13.7	11.3	12.5
CHLOROPHYLL-B (UG/L)	0.7	0.4	0.7	0.2
CHLOROPHYLL-C (UG/L)	0.2	< 0.1	0.4	< 0.1

PARAMETER NAME (UNITS)	STATION 09 7/17/79	STATION 10 7/17/79	STATION 11 7/17/79	STATION 12 7/18/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	70.	40.	70.	40.
BIOMASS, PLANKTON (GM/CU M)	7.	8.	7.	< 1.
CHLOROPHYLL-A (UG/L)	12.0	14.6	13.8	1.0
CHLOROPHYLL-B (UG/L)	1.5	0.9	0.8	< 0.1
CHLOROPHYLL-C (UG/L)	0.2	< 0.1	< 0.4	< 0.1

PARAMETER NAME (UNITS)	STATION 13 7/16/79	STATION 14 7/16/79	STATION 15 7/16/79	STATION 16 7/16/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	110.	40.	140.	30.
BIOMASS, PLANKTON (GM/CU M)	3.	< 1.	2.	< 1.
CHLOROPHYLL-A (UG/L)	17.4	6.7	28.4	4.9
CHLOROPHYLL-B (UG/L)	1.4	0.4	2.0	1.7
CHLOROPHYLL-C (UG/L)	0.7	< 0.1	1.9	< 0.1

TABLE D-18b

PARAMETER NAME (UNITS)	STATION 17 7/16/79	STATION 18 7/17/79	STATION 19 7/17/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	< 50.	140.	80.
BIOMASS, PLANKTON (GM/CU M)	9.	9.	6.
CHLOROPHYLL-A (UG/L)	1.6	10.4	6.2
CHLOROPHYLL-B (UG/L)	0.5	1.1	0.5
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.2

TABLE D-19a

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	30.	50.	40.	80.
BIOMASS, PLANKTON (GM/CU M)	2.	1.	< 1.	2.
CHLOROPHYLL-A (UG/L)	9.9	11.0	10.0	11.8
CHLOROPHYLL-B (UG/L)	1.0	0.1	0.2	1.6
CHLOROPHYLL-C (UG/L)	0.3	< 0.1	< 0.1	0.4

PARAMETER NAME (UNITS)	STATION 05 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79	STATION 08 8/14/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	80.	40.	110.	120.
BIOMASS, PLANKTON (GM/CU M)	3.	1.	5.	4.
CHLOROPHYLL-A (UG/L)	10.3	10.0	8.1	9.9
CHLOROPHYLL-B (UG/L)	0.5	0.2	0.5	0.2
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	0.2	< 0.1

PARAMETER NAME (UNITS)	STATION 09 8/14/79	STATION 10 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	100.	50.	60.	30.
BIOMASS, PLANKTON (GM/CU M)	5.	5.	4.	< 1.
CHLOROPHYLL-A (UG/L)	9.6	8.0	7.6	0.8
CHLOROPHYLL-B (UG/L)	1.8	1.1	0.9	< 0.1
CHLOROPHYLL-C (UG/L)	0.1	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 13 8/13/79	STATION 14 8/16/79	STATION 15 8/13/79	STATION 16 8/13/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	110.	30.	410.	40.
BIOMASS, PLANKTON (GM/CU M)	6.	2.	4.	4.
CHLOROPHYLL-A (UG/L)	12.9	14.0	14.4	3.1
CHLOROPHYLL-B (UG/L)	1.3	1.6	1.5	1.3
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	0.1	0.4

TABLE D-19b

PARAMETER NAME (UNITS)	STATION 17 8/13/79	STATION 18 8/14/79	STATION 19 8/14/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	30.	120.	60.
BIOMASS, PLANKTON (GM/CU M)	3.	4.	4.
CHLOROPHYLL-A (UG/L)	2.4	6.6	4.8
CHLOROPHYLL-B (UG/L)	0.7	0.6	1.0
CHLOROPHYLL-C (UG/L)	< 0.2	0.3	< 0.1

TABLE D-20a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 9/26/79	STATION 02 9/26/79	STATION 03 9/26/79	STATION 04 9/26/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	100	--	88	168
BIOMASS, PLANKTON (ML/L)	<1.00	3.60	<1.00	4.70
CHLOROPHYLL-A (UG/L)	17.9	17.0	17.5	16.2
CHLOROPHYLL-B (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 05 9/26/79	STATION 06 9/26/79	STATION 07 9/25/79	STATION 08 9/25/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	111	37	174	61
BIOMASS, PLANKTON (ML/L)	2.00	2.10	2.70	4.20
CHLOROPHYLL-A (UG/L)	16.5	11.1	17.3	18.5
CHLOROPHYLL-B (UG/L)	< 0.1	0.1	< 0.1	0.6
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	0.1

PARAMETER NAME (UNITS)	STATION 09 9/25/79	STATION 10 9/25/79	STATION 11 9/25/79	STATION 12 9/24/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	--	--	--	374
BIOMASS, PLANKTON (ML/L)	3.20	4.70	4.10	<1.00
CHLOROPHYLL-A (UG/L)	13.5	12.6	15.7	1.5
CHLOROPHYLL-B (UG/L)	0.1	0.1	< 0.1	0.8
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 13 9/24/79	STATION 14 9/24/79	STATION 15 9/24/79	STATION 16 9/24/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	--	--	--	< 32
BIOMASS, PLANKTON (ML/L)	2.80	3.50	1.90	<1.00
CHLOROPHYLL-A (UG/L)	10.5	5.5	10.3	3.4
CHLOROPHYLL-B (UG/L)	1.0	0.7	1.1	0.5
CHLOROPHYLL-C (UG/L)	< 0.1	0.5	< 0.1	< 0.1

TABLE D-20b

PARAMETER NAME (UNITS)	STATION 17 9/24/79	STATION 18 9/25/79	STATION 19 9/25/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	< 26	105	--
BIOMASS, PLANKTON (ML/L)	<1.00	2.20	<1.00
CHLOROPHYLL-A (UG/L)	2.1	11.6	8.8
CHLOROPHYLL-B (UG/L)	0.4	2.5	< 0.1
CHLOROPHYLL-C (UG/L)	< 0.2	< 0.1	< 0.1

TABLE D-21a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-6/1979)

BIOLOGICAL DATA (COMPOSITE SAMPLES)

PARAMETER NAME (UNITS)	STATION 01 12/ 5/79	STATION 02 12/ 5/79	STATION 03 12/ 5/79	STATION 04 12/ 5/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	--	--	--	--
BIOMASS, PLANKTON (GM/CU. M)	4.	5.	5.	5.
CHLOROPHYLL-A (UG/L)	12.7	12.0	12.6	13.7
CHLOROPHYLL-B (UG/L)	2.5	0.8	2.0	4.1
CHLOROPHYLL-C (UG/L)	0.7	0.7	< 0.1	0.5

PARAMETER NAME (UNITS)	STATION 05 12/ 5/79	STATION 06 12/ 6/79	STATION 07 12/ 6/79	STATION 08 12/ 6/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	120.	160.	160.	120.
BIOMASS, PLANKTON (GM/CU M)	5.	5.	6.	6.
CHLOROPHYLL-A (UG/L)	11.4	13.2	14.7	14.5
CHLOROPHYLL-B (UG/L)	0.9	2.1	2.3	2.1
CHLOROPHYLL-C (UG/L)	0.3	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 09 12/ 6/79	STATION 10 12/ 6/79	STATION 11 12/ 5/79	STATION 12 12/ 6/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	200.	100.	--	40.
BIOMASS, PLANKTON (GM/CU M)	7.	6.	5.	3.
CHLOROPHYLL-A (UG/L)	11.8	14.6	17.0	0.9
CHLOROPHYLL-B (UG/L)	2.3	0.5	2.1	0.6
CHLOROPHYLL-C (UG/L)	0.4	< 0.1	< 0.1	< 0.1

PARAMETER NAME (UNITS)	STATION 13 12/ 6/79	STATION 14 12/ 3/79	STATION 15 12/ 3/79	STATION 16 12/ 3/79
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	60.	--	--	--
BIOMASS, PLANKTON (GM/CU M)	4.	4.	4.	4.
CHLOROPHYLL-A (UG/L)	1.4	1.3	2.8	1.6
CHLOROPHYLL-B (UG/L)	0.6	1.3	1.4	0.1
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1

TABLE D-21b

PARAMETER NAME (UNITS)	STATION 17 12/ 3/79	STATION 18 12/ 4/79	STATION 19 12/ 4/79
BIOMASS MEASUREMENTS			
EUPHOTIC ZONE			
ATP-ADENOSINE TRIPHOSPHATE (NG/L)	--	--	--
BIOMASS, PLANKTON (GM/CU M)	3.	5.	5.
CHLOROPHYLL-A (UG/L)	1.6	0.7	8.6
CHLOROPHYLL-B (UG/L)	0.7	0.2	0.9
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1

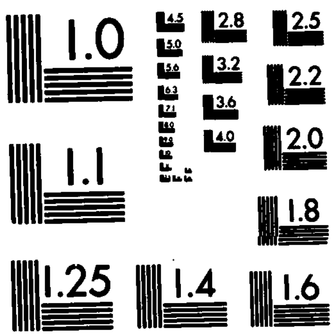
APPENDIX E

LABORATORY QUALITY CONTROL DATA

LIST OF TABLES

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 4/8

UNCLASSIFIED DACW01-78-C-0101 F/G 8/8 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE E-1a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 5-A 2/21/79	STATION 5-B 2/21/79	STATION 14-A 2/22/79	STATION 14-B 2/22/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	95.	85.	35.	35.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.60	8.60	2.60	2.10
TOTAL FILTERABLE RESIDUE (MG/L)	67.	73.	115.	117.
TOTAL NONFILTERABLE RESIDUE (MG/L)	16.	18.	3.	7.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	18.	20.	85.	71.
CHLORIDE (MG CL/L)	5.	4.	5.	5.
SULFATE, TOTAL (MG SO4/L)	12.	12.	< 1.	< 1.
CALCIUM, TOTAL (MG CA/L)	5.0	5.3	21.5	20.0
IRON, DISSOLVED (UG FE/L)	150	150	80	80
IRON, TOTAL (UG FE/L)	1320	1290	440	380
MAGNESIUM, TOTAL (MG MG/L)	1.4	1.4	0.8	0.7
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	70	< 50	50
POTASSIUM, TOTAL (MG K/L)	2.6	2.5	0.6	0.6
SODIUM, TOTAL (MG NA/L)	8.30	9.20	3.70	3.00
ZINC, TOTAL (UG ZN/L)	30	30	20	10
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	7.	5.	6.
CARBON, TOTAL ORGANIC (MG C/L)	8.	8.	5.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.03	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.48	0.46	0.37	0.38
NITROGEN, TOTAL INORGANIC (MG N/L)	0.60	0.62	0.30	0.30
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.6	0.7	0.3	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	0.5	0.5	0.4	0.4
NITROGEN, TOTAL (MG N/L)	1.1	1.1	0.7	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.02	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.07	0.05	0.02	0.02
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLFORM (LOG10(/100ML))	2.53	2.43	1.72	1.73
FECAL STREPTOCOCCI (LOG10(/100ML))	2.72	2.83	1.70	1.56
FC/FS RATIO	0.64	0.40	1.06	1.42
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	14.6	13.3	2.0	2.1
CHLOROPHYLL-B (UG/L)	0.6	1.8	0.3	0.5
CHLOROPHYLL-C (UG/L)	< 0.1	0.2	0.1	0.1

TABLE E-1b

PARAMETER NAME (UNITS)	STATION 17-A 2/19/79	STATION 17-B 2/19/79	STATION 19-A 2/20/79	STATION 19-B 2/20/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	75.	80.	70.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	7.10	7.60	9.10	11.00
TOTAL FILTERABLE RESIDUE (MG/L)	78.	89.	71.	69.
TOTAL NONFILTERABLE RESIDUE (MG/L)	9.	9.	16.	15.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	37.	37.	26.	24.
CHLORIDE (MG CL/L)	5.	5.	5.	4.
SULFATE, TOTAL (MG SO4/L)	4.	4.	6.	6.
CALCIUM, TOTAL (MG CA/L)	10.5	11.1	6.6	6.2
IRON, DISSOLVED (UG FE/L)	250	250	240	240
IRON, TOTAL (UG FE/L)	1290	1300	1140	1140
MAGNESIUM, TOTAL (MG MG/L)	1.0	1.1	1.4	1.4
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	70	60
POTASSIUM, TOTAL (MG K/L)	1.2	1.2	1.8	1.8
SODIUM, TOTAL (MG NA/L)	2.10	2.10	5.40	5.30
ZINC, TOTAL (UG ZN/L)	20	20	20	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	6.	5.	4.
CARBON, TOTAL ORGANIC (MG C/L)	4.	6.	5.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.02	<0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.45	0.49	0.41	0.39
NITROGEN, TOTAL INORGANIC (MG N/L)	0.44	0.43	<0.35	0.33
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.5	0.4	0.4
NITROGEN, TOTAL ORGANIC (MG N/L)	0.5	0.5	< 0.4	0.4
NITROGEN, TOTAL (MG N/L)	0.9	0.9	0.8	0.7
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.05	0.17	0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.06	0.06	0.05	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLFORM (LOG10(/100ML))	3.14	3.16	1.08	--
FECAL STREPTOCOCCI (LOG10(/100ML))	2.03	1.99	0.60	--
FC/FS RATIO	12.90	14.59	3.00	--
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	0.6	1.9	12.3	10.8
CHLOROPHYLL-B (UG/L)	0.3	< 0.1	1.7	1.7
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	0.1

TABLE E-2a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 6-A 4/ 4/79	STATION 6-B 4/ 4/79	STATION 11-A 4/ 3/79	STATION 11-B 4/ 3/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	55.	55.	41.	39.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00	15.00	8.40	8.00
TOTAL FILTERABLE RESIDUE (MG/L)	55.	52.	65.	55.
TOTAL NONFILTERABLE RESIDUE (MG/L)	14.	15.	11.	13.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	15.	15.	29.	29.
SULFATE, TOTAL (MG SO4/L)	6.	6.	5.	5.
IRON, DISSOLVED (UG FE/L)	160	160	200	160
IRON, TOTAL (UG FE/L)	1210	1220	760	750
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	< 50	< 50
ZINC, TOTAL (UG ZN/L)	30	40	10	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	6.	< 5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	5.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.03	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.32	0.34	0.26	0.24
NITROGEN, TOTAL INORGANIC (MG N/L)	0.35	0.37	<0.26	<0.26
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.05	0.04	0.04
BIOLOGICAL DATA				
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	8.3	8.0	26.1	27.1
CHLOROPHYLL-B (UG/L)	1.3	1.4	1.1	1.0
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	0.6	0.7

TABLE E-2b

PARAMETER NAME (UNITS)	STATION 17-A 4/ 2/79	STATION 17-B 4/ 2/79
PHYSICAL DATA		
LABORATORY DATA		
COLOR (PT-CO UNITS)	44.	42.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.40	6.00
TOTAL FILTERABLE RESIDUE (MG/L)	78.	84.
TOTAL NONFILTERABLE RESIDUE (MG/L)	3.	4.
CHEMICAL DATA		
MINERALS AND METALS		
ALKALINITY, TOTAL (MG CACO3/L)	43.	44.
SULFATE, TOTAL (MG SO4/L)	2.	2.
IRON, DISSOLVED (UG FE/L)	200	210
IRON, TOTAL (UG FE/L)	830	830
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50
ZINC, TOTAL (UG ZN/L)	20	20
NUTRIENTS		
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	3.
CARBON, TOTAL ORGANIC (MG C/L)	5.	4.
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.50	4.50
NITROGEN, TOTAL INORGANIC (MG N/L)	<0.52	0.52
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.04	0.03
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04
BIOLOGICAL DATA		
BIOMASS MEASUREMENTS		
CHLOROPHYLL-A (UG/L)	2.4	2.4
CHLOROPHYLL-B (UG/L)	0.4	0.2
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1

TABLE E-3a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 6-A 6/ 6/79	STATION 6-B 6/ 6/79	STATION 17-A 6/ 4/79	STATION 17-B 6/ 4/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	60.	60.	48.	47.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00	15.00	15.00	16.00
TOTAL FILTERABLE RESIDUE (MG/L)	48.	45.	69.	74.
TOTAL NONFILTERABLE RESIDUE (MG/L)	8.	5.	9.	7.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	16.	15.	45.	48.
SULFATE, TOTAL (MG SO4/L)	5.	4.	1.	2.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, TOTAL (UG FE/L)	1100	1100	1500	1530
MANGANESE, TOTAL (UG MN/L)	60	60	< 50	< 50
ZINC, TOTAL (UG ZN/L)	< 10	10	40	40
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	6.	2.	< 3.
CARBON, TOTAL ORGANIC (MG C/L)	7.	7.	5.	3.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.06	0.06	0.07	0.07
NITROGEN, NITRATE+NITRITE (MG N/L)	0.23	0.23	0.66	0.70
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.02	0.02	0.06	0.06
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.07	0.07
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.43	1.32	2.63	2.68
FECAL STREPTOCOCCI (LOG10(/100ML))	1.79	1.72	1.00	1.26
FC/FS RATIO	0.44	0.40	43.00	26.70
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	3.3	3.0	1.8	1.2
CHLOROPHYLL-B (UG/L)	0.2	0.2	0.4	< 0.1
CHLOROPHYLL-C (UG/L)	0.1	< 0.1	0.3	< 0.1

TABLE E-3b

PARAMETER NAME (UNITS)	STATION 19-A 6/ 5/79	STATION 19-B 6/ 5/79
PHYSICAL DATA		
LABORATORY DATA		
COLOR (PT-CO UNITS)	8.	8.
TURBIDITY, HACH TURBIDIMETER (FTU)	15.00	15.00
TOTAL FILTERABLE RESIDUE (MG/L)	56.	56.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	11.
CHEMICAL DATA		
MINERALS AND METALS		
ALKALINITY, TOTAL (MG CACO3/L)	33.	33.
SULFATE, TOTAL (MG SO4/L)	4.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1
IRON, TOTAL (UG FE/L)	960	1000
MANGANESE, TOTAL (UG MN/L)	60	60
ZINC, TOTAL (UG ZN/L)	< 10	< 10
NUTRIENTS		
CARBON, DISSOLVED ORGANIC (MG C/L)	< 6.	< 6.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.04
NITROGEN, NITRATE+NITRITE (MG N/L)	0.23	0.22
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03
BIOLOGICAL DATA		
BACTERIOLOGICAL DATA		
FECAL COLIFORM (LOG10(/100ML))	0.48	0.30
FECAL STREPTOCOCCI (LOG10(/100ML))	3.92	4.02
FC/FS RATIO	<0.01	<0.01
BIOMASS MEASUREMENTS		
CHLOROPHYLL-A (UG/L)	8.2	8.4
CHLOROPHYLL-B (UG/L)	< 0.1	0.1
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1

TABLE E-4a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 2-A 7/19/79	STATION 2-B 7/19/79	STATION 12-A 7/18/79	STATION 12-B 7/18/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	38.	38.	14.	17.
TURBIDITY, HACH TURBIDIMETER (FTU)	8.40	8.60	1.40	1.80
TOTAL FILTERABLE RESIDUE (MG/L)	63.	57.	71.	71.
TOTAL NONFILTERABLE RESIDUE (MG/L)	11.	11.	3.	2.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	16.	17.	33.	34.
SULFATE, TOTAL (MG SO4/L)	4.	5.	1.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	60	60	< 50	< 50
IRON, TOTAL (UG FE/L)	810	640	110	120
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	50	< 50	< 50	< 50
ZINC, TOTAL (UG ZN/L)	20	20	30	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	< 5.	4.
CARBON, TOTAL ORGANIC (MG C/L)	6.	5.	5.	7.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.02	0.02	0.05	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.19	0.16	0.02	0.02
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.02	0.03
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLFORM (LOG10(/100ML))	1.00	0.60	<0.00	0.70
FECAL STREPTOCOCCI (LOG10(/100ML))	1.82	1.83	0.85	0.90
FC/FS RATIO	0.15	0.06	<0.14	0.63
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	12.3	13.3	1.2	0.8
CHLOROPHYLL-B (UG/L)	1.0	< 0.1	0.1	< 0.1
CHLOROPHYLL-C (UG/L)	0.4	< 0.1	< 0.1	< 0.1

TABLE E-4b

PARAMETER NAME (UNITS)	STATION 17-A 7/16/79	STATION 17-B 7/16/79	STATION 18-A 7/17/79	STATION 18-B 7/17/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	55.	55.	65.	65.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.60	9.60	9.60	9.60
TOTAL FILTERABLE RESIDUE (MG/L)	88.	91.	82.	82.
TOTAL NONFILTERABLE RESIDUE (MG/L)	10.	10.	13.	12.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	34.	39.	40.	40.
SULFATE, TOTAL (MG SO4/L)	4.	3.	5.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	270	250	50	60
IRON, TOTAL (UG FE/L)	1270	1120	1000	840
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	110	90	100	120
ZINC, TOTAL (UG ZN/L)	40	50	30	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	7.	6.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	<0.02	0.02	0.05	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.48	0.48	0.22	0.21
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	0.03	0.02	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.05	0.05	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLFORM (LOG10(/100ML))	2.15	2.04	0.48	0.30
FECAL STREPTOCOCCI (LOG10(/100ML))	1.83	1.95	3.36	3.28
FC/FS RATIO	2.09	1.24	<0.01	<0.01
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	1.0	2.1	6.0	6.4
CHLOROPHYLL-B (UG/L)	0.3	0.6	0.2	0.7
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	0.3

TABLE E-5a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 1-A 8/15/79	STATION 1-B 8/15/79	STATION 12-A 8/16/79	STATION 12-B 8/16/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	24.	24.	14.	14.
TURBIDITY, HACH TURBIDIMETER (FTU)	4.00	3.70	1.20	1.00
TOTAL FILTERABLE RESIDUE (MG/L)	46.	48.	53.	50.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	< 10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	17.	17.	37.	37.
CHLORIDE (MG CL/L)	4.	4.	3.	3.
SULFATE, TOTAL (MG SO4/L)	4.	4.	< 1.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	3.7	3.6	11.0	10.0
HARDNESS, TOTAL (MG CACO3/L)	26.0	26.0	52.0	48.0
IRON, DISSOLVED (UG FE/L)	80	80	80	70
IRON, TOTAL (UG FE/L)	540	540	270	250
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	70	70	< 50	< 50
POTASSIUM, TOTAL (MG K/L)	1.9	1.9	0.2	0.2
SODIUM, TOTAL (MG NA/L)	5.90	6.00	1.50	1.50
ZINC, TOTAL (UG ZN/L)	50	30	60	40
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	4.	5.	7.	7.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	7.	7.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.02	<0.02	<0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.09	0.10	0.01	0.02
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.5	0.5	0.6
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.02	0.01	0.02
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.20	0.70	<0.00	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	1.80	1.76	1.57	1.62

TABLE E-5b

PARAMETER NAME (UNITS)	STATION 17-A 8/13/79	STATION 17-B 8/13/79	STATION 19-A 8/14/79	STATION 19-B 8/14/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	20.	20.	38.	38.
TURBIDITY, HACH TURBIDIMETER (FTU)	2.50	2.50	7.10	7.40
TOTAL FILTERABLE RESIDUE (MG/L)	91.	99.	73.	71.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	12.	10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	64.	62.	36.	37.
CHLORIDE (MG CL/L)	5.	4.	3.	5.
SULFATE, TOTAL (MG SO4/L)	1.	2.	4.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	18.9	17.7	8.3	6.9
HARDNESS, TOTAL (MG CACO3/L)	86.0	87.0	60.0	57.0
IRON, DISSOLVED (UG FE/L)	120	130	110	90
IRON, TOTAL (UG FE/L)	430	490	680	690
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	150	160
POTASSIUM, TOTAL (MG K/L)	1.2	1.3	1.6	1.7
SODIUM, TOTAL (MG NA/L)	4.50	4.50	5.50	6.00
ZINC, TOTAL (UG ZN/L)	60	30	110	100
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	5.	5.	5.	5.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.03	0.03	0.05	0.05
NITROGEN, NITRATE+NITRITE (MG N/L)	0.55	0.47	0.07	0.07
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.5	0.5	0.5	0.5
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	0.05	<0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.05	0.03	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	0.95	1.00	--	--
FECAL STREPTOCOCCI (LOG10(/100ML))	1.11	0.70	3.48	3.57

TABLE E-6a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-79-C-0091) PHASE II, CYCLE 6 (9/24-26/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 1-A 9/26/79	STATION 1-B 9/26/79	STATION 17-A 9/24/79	STATION 17-B 9/24/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	25.	25.	32.	31.
TURBIDITY, HACH TURBIDIMETER (FTU)	3.80	3.20	4.00	3.80
TOTAL FILTERABLE RESIDUE (MG/L)	46.	42.	81.	74.
TOTAL NONFILTERABLE RESIDUE (MG/L)	7.	6.	6.	6.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	17.	17.	42.	42.
SULFATE, TOTAL (MG SO4/L)	5.	5.	3.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	< 50	180	170
IRON, TOTAL (UG FE/L)	440	400	720	750
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	50	< 50
ZINC, TOTAL (UG ZN/L)	20	50	40	30
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	7.	4.	5.
CARBON, TOTAL ORGANIC (MG C/L)	7.	7.	5.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.02	0.07	0.08
NITROGEN, NITRATE+NITRITE (MG N/L)	0.09	0.09	0.61	0.61
NITROGEN, TOTAL INORGANIC (MG N/L)	0.13	0.11	0.68	0.69
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	0.03	0.03
PHOSPHORUS, TOTAL (MG P/L)	0.03	0.03	0.05	0.05
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	2.15	2.26	1.48	1.54
FECAL STREPTOCOCCI (LOG10(/100ML))	2.87	2.86	1.54	1.61
FC/FS RATIO	0.19	0.25	0.86	0.85
BIOMASS MEASUREMENTS				
CHLOROPHYLL-A (UG/L)	17.7	18.0	2.2	2.0
CHLOROPHYLL-B (UG/L)	< 0.1	< 0.1	0.4	0.4
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	< 0.1

TABLE E-6b

PARAMETER NAME (UNITS)	STATION 19-A 9/25/79	STATION 19-B 9/25/79
PHYSICAL DATA		
LABORATORY DATA		
COLOR (PT-CO UNITS)	33.	38.
TURBIDITY, HACH TURBIDIMETER (FTU)	9.40	12.00
TOTAL FILTERABLE RESIDUE (MG/L)	76.	84.
TOTAL NONFILTERABLE RESIDUE (MG/L)	18.	16.
CHEMICAL DATA		
MINERALS AND METALS		
ALKALINITY, TOTAL (MG CACO3/L)	46.	45.
SULFATE, TOTAL (MG SO4/L)	4.	4.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1
IRON, DISSOLVED (UG FE/L)	< 50	< 50
IRON, TOTAL (UG FE/L)	1110	1030
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	90	90
ZINC, TOTAL (UG ZN/L)	40	30
NUTRIENTS		
CARBON, DISSOLVED ORGANIC (MG C/L)	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	7.	6.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.08	0.08
NITROGEN, NITRATE+NITRITE (MG N/L)	0.29	0.26
NITROGEN, TOTAL INORGANIC (MG N/L)	0.37	0.34
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.01	0.01
PHOSPHORUS, TOTAL (MG P/L)	0.05	0.05
BIOLOGICAL DATA		
BACTERIOLOGICAL DATA		
FECAL COLIFORM (LOG10(/100ML))	0.30	0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	3.68	3.67
FC/FS RATIO	<0.03	<0.03
BIOMASS MEASUREMENTS		
CHLOROPHYLL-A (UG/L)	8.5	9.0
CHLOROPHYLL-B (UG/L)	< 0.1	< 0.1
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1

TABLE E-7a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-6/1979)

DATA FROM DUPLICATE ANALYSES

PARAMETER NAME (UNITS)	STATION 1-A 12/ 5/79	STATION 1-B 12/ 5/79	STATION 12-A 12/ 6/79	STATION 12-B 12/ 6/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	17.	20.	11.	12.
TURBIDITY, HACH TURBIDIMETER (FTU)	6.80	7.50	1.70	1.70
TOTAL FILTERABLE RESIDUE (MG/L)	52.	50.	63.	74.
TOTAL NONFILTERABLE RESIDUE (MG/L)	14.	11.	< 10.	< 10.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	15.	16.	44.	43.
CHLORIDE (MG CL/L)	4.	5.	3.	3.
SULFATE, TOTAL (MG SO4/L)	6.	5.	< 1.	< 1.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	2.5	2.6	16.9	19.0
HARDNESS, TOTAL (MG CACO3/L)	19.2	17.9	51.2	50.5
IRON, DISSOLVED (UG FE/L)	< 50	< 50	50	50
IRON, TOTAL (UG FE/L)	830	700	200	240
MAGNESIUM, TOTAL (MG MG/L)	1.1	1.3	0.9	0.8
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	70	70
POTASSIUM, TOTAL (MG K/L)	1.9	2.4	0.8	0.8
SODIUM, TOTAL (MG NA/L)	6.30	5.90	3.60	3.50
ZINC, TOTAL (UG ZN/L)	20	20	20	20
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	7.	6.	2.	10.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	9.	8.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.04	0.02	0.02	0.02
NITROGEN, NITRATE+NITRITE (MG N/L)	0.34	0.35	0.04	0.03
NITROGEN, TOTAL INORGANIC (MG N/L)	0.39	0.37	0.06	0.05
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.4	0.3	0.3	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	0.3	0.3	0.3	0.3
NITROGEN, TOTAL (MG N/L)	0.7	0.6	0.3	0.3
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS, TOTAL (MG P/L)	0.02	0.02	0.01	0.01
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.41	1.45	0.00	<0.00
FECAL STREPTOCOCCI (LOG10(/100ML))	--	--	1.28	1.08
FC/FS RATIO	--	--	0.05	<0.08
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
CHLOROPHYLL-A (UG/L)	10.7	14.6	1.1	0.9
CHLOROPHYLL-B (UG/L)	4.2	0.8	0.6	0.6
CHLOROPHYLL-C (UG/L)	0.7	0.7	< 0.1	< 0.1

TABLE E-7b

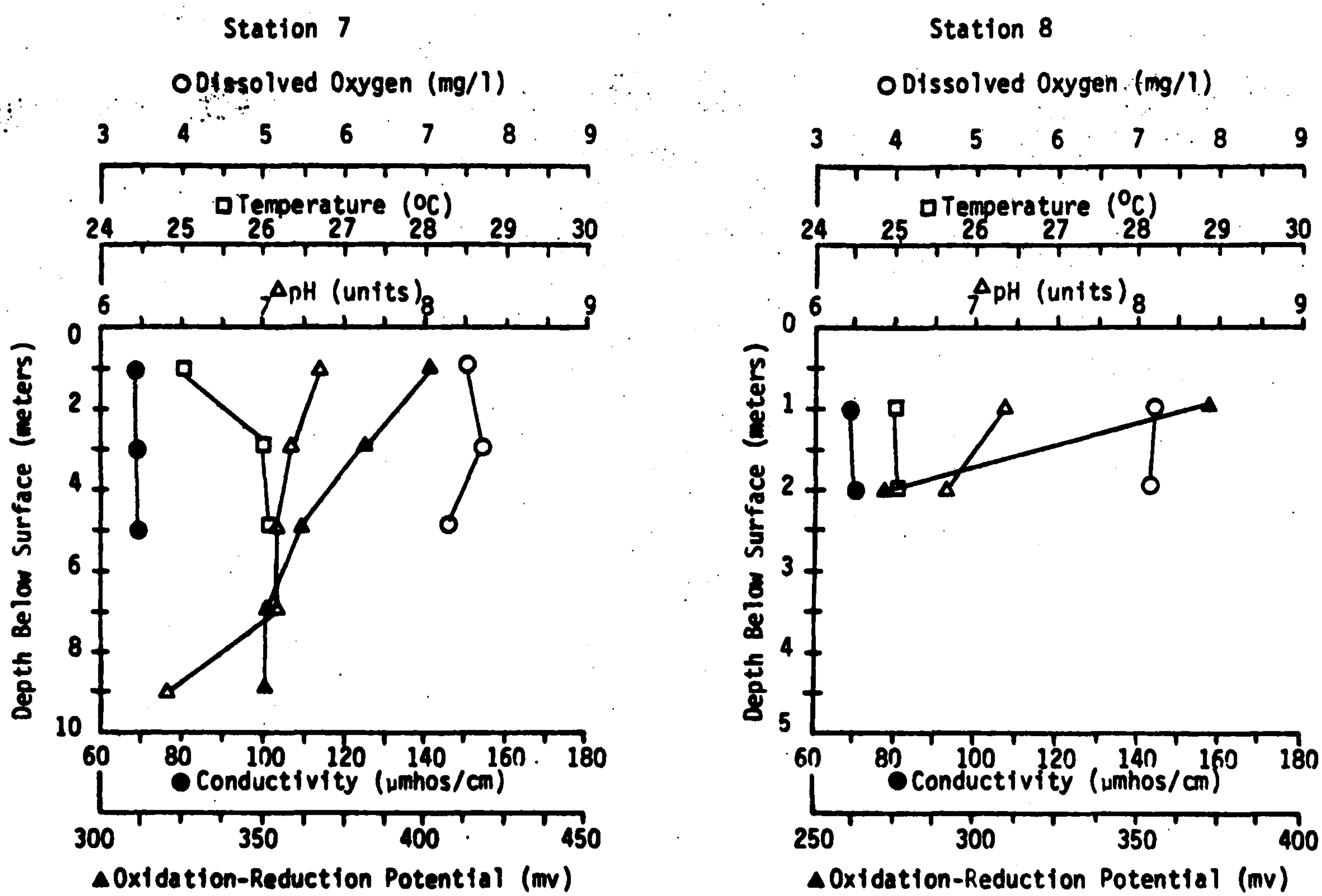
PARAMETER NAME (UNITS)	STATION 17-A 12/ 3/79	STATION 17-B 12/ 3/79	STATION 19-A 12/ 4/79	STATION 19-B 12/ 4/79
PHYSICAL DATA				
LABORATORY DATA				
COLOR (PT-CO UNITS)	50.	50.	26.	24.
TURBIDITY, HACH TURBIDIMETER (FTU)	5.60	6.20	9.30	9.40
TOTAL FILTERABLE RESIDUE (MG/L)	79.	78.	72.	70.
TOTAL NONFILTERABLE RESIDUE (MG/L)	< 10.	< 10.	14.	13.
CHEMICAL DATA				
MINERALS AND METALS				
ALKALINITY, TOTAL (MG CACO3/L)	35.	36.	36.	35.
CHLORIDE (MG CL/L)	5.	5.	4.	5.
SULFATE, TOTAL (MG SO4/L)	2.	2.	5.	5.
SULFIDE, TOTAL (MG S/L)	< 0.1	< 0.1	< 0.1	< 0.1
CALCIUM, TOTAL (MG CA/L)	7.2	7.3	6.6	8.3
HARDNESS, TOTAL (MG CACO3/L)	39.7	42.5	37.4	37.0
IRON, DISSOLVED (UG FE/L)	500	510	100	90
IRON, TOTAL (UG FE/L)	1290	1290	950	1200
MAGNESIUM, TOTAL (MG MG/L)	0.9	0.9	1.1	1.4
MANGANESE, DISSOLVED (UG MN/L)	< 50	< 50	< 50	< 50
MANGANESE, TOTAL (UG MN/L)	< 50	< 50	60	60
POTASSIUM, TOTAL (MG K/L)	2.0	1.8	2.0	1.8
SODIUM, TOTAL (MG NA/L)	3.40	3.00	4.10	4.40
ZINC, TOTAL (UG ZN/L)	20	30	30	50
NUTRIENTS				
CARBON, DISSOLVED ORGANIC (MG C/L)	6.	6.	5.	5.
CARBON, TOTAL ORGANIC (MG C/L)	6.	6.	5.	5.
NITROGEN, TOTAL AMMONIA (MG N/L)	0.05	0.04	0.02	0.03
NITROGEN, NITRATE+NITRITE (MG N/L)	0.42	0.46	0.38	0.36
NITROGEN, TOTAL INORGANIC (MG N/L)	0.47	0.50	0.40	0.39
NITROGEN, TOTAL KJELDAHL (MG N/L)	0.3	0.2	0.3	0.3
NITROGEN, TOTAL ORGANIC (MG N/L)	0.2	0.2	0.3	0.3
NITROGEN, TOTAL (MG N/L)	0.7	0.7	0.7	0.6
ORTHOPHOSPHATE, DISSOLVED (MG P/L)	0.03	0.03	0.01	0.02
PHOSPHORUS, TOTAL (MG P/L)	0.04	0.04	0.04	0.04
BIOLOGICAL DATA				
BACTERIOLOGICAL DATA				
FECAL COLIFORM (LOG10(/100ML))	1.91	1.96	1.15	1.20
FECAL STREPTOCOCCI (LOG10(/100ML))	--	--	--	--
FC/FS RATIO	--	--	--	--
BIOMASS MEASUREMENTS				
EUPHOTIC ZONE				
CHLOROPHYLL-A (UG/L)	1.6	1.5	9.1	7.0
CHLOROPHYLL-B (UG/L)	0.1	1.2	0.1	1.6
CHLOROPHYLL-C (UG/L)	< 0.1	< 0.1	< 0.1	0.2

APPENDIX F

IN SITU VERTICAL PROFILES AND ISOPLETHS

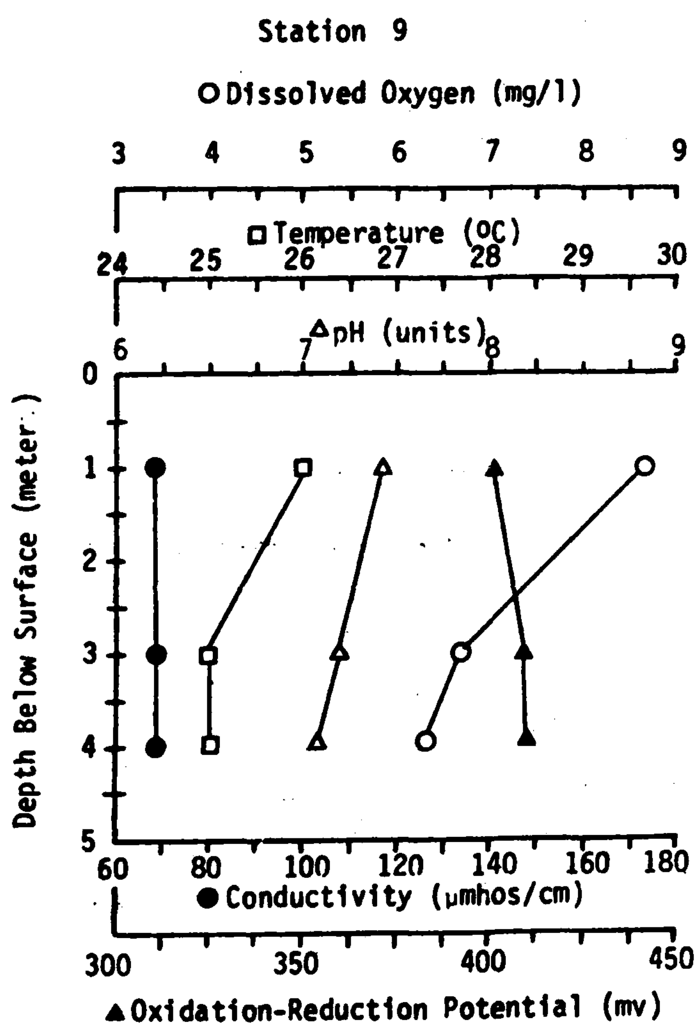
LIST OF FIGURES

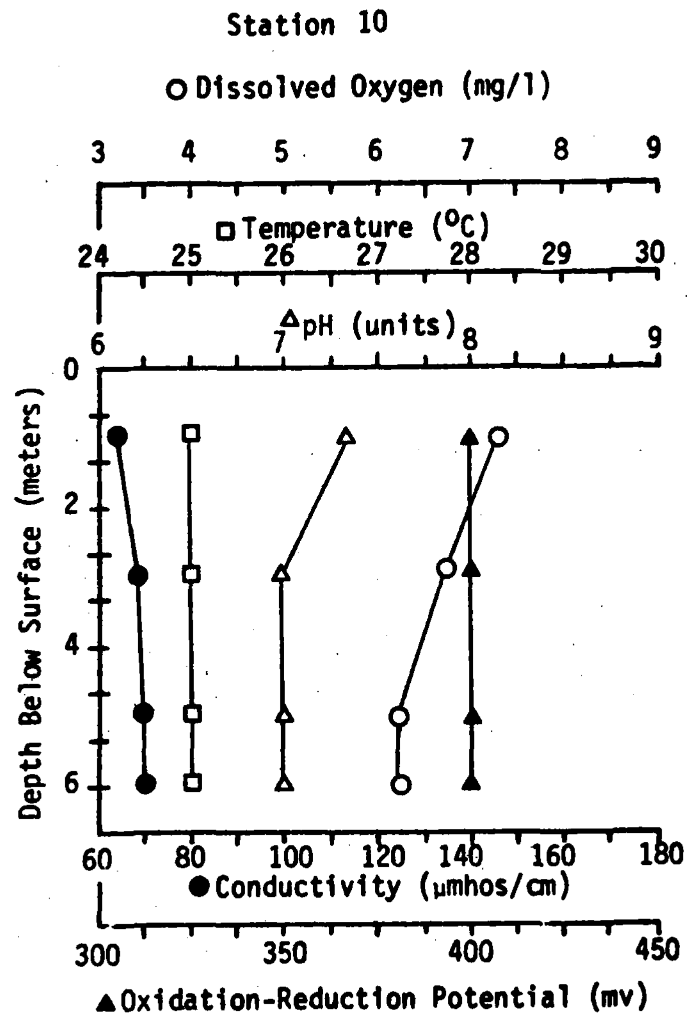
FIGURE F-1a. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 3, JUNE 4-6, 1979.



Unless otherwise noted, profiles taken at midpoint in cross section.

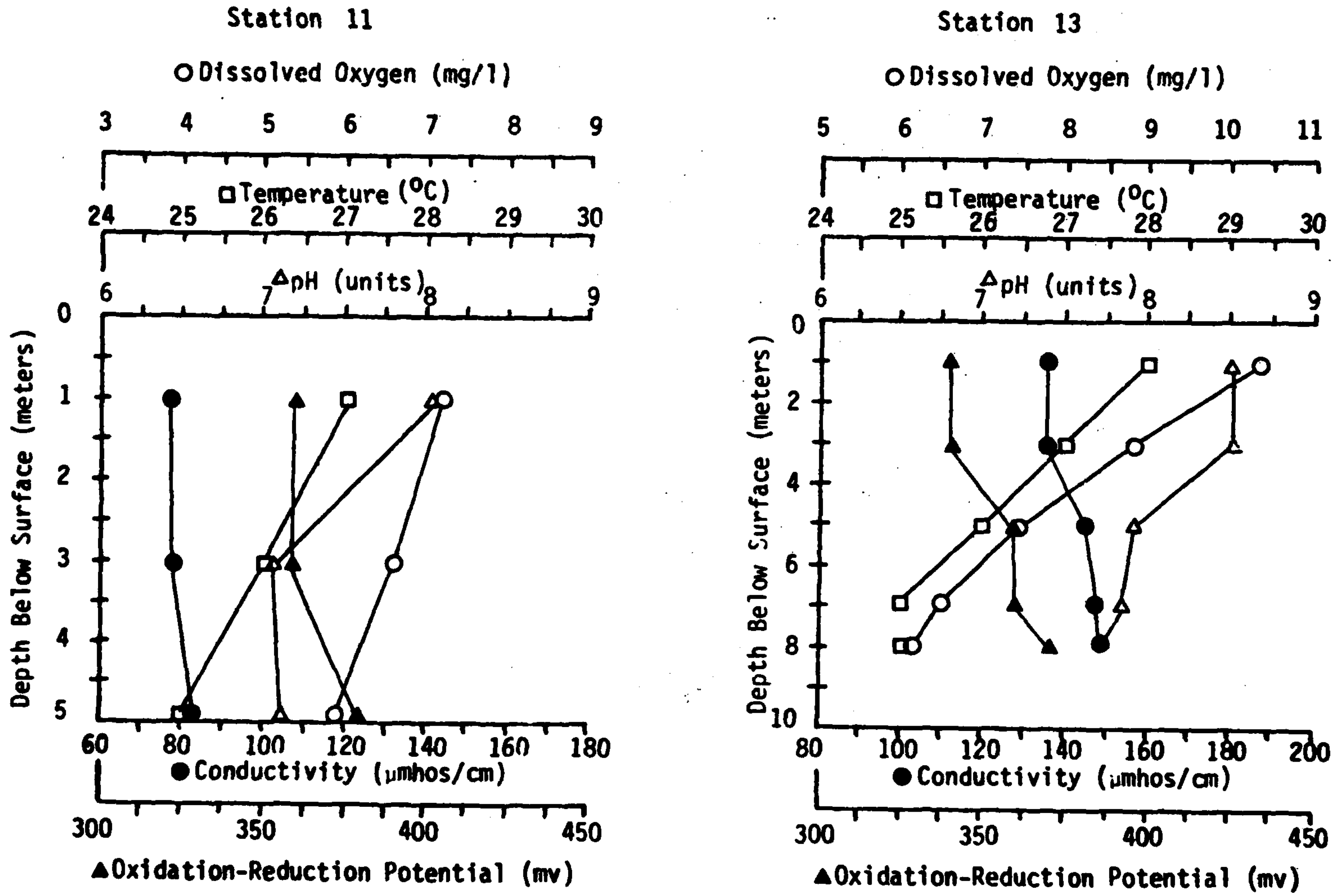
FIGURE F-1b. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN <u>IN SITU</u> CYCLE 3, JUNE 4-6, 1979.





Unless otherwise noted, profiles taken at midpoint in cross section.

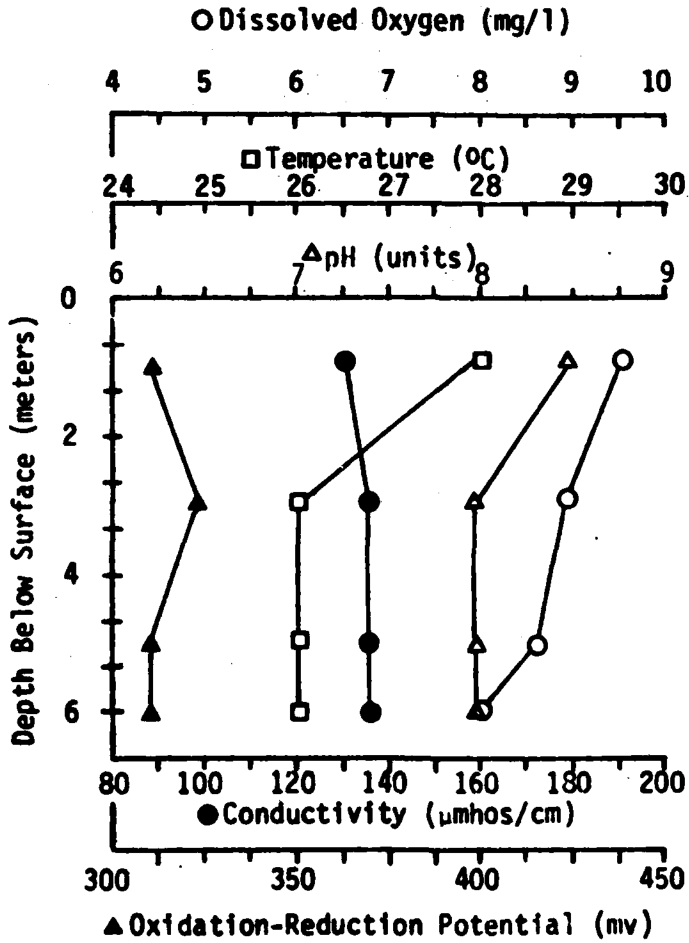
FIGURE F-1c. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 3, JUNE 4-6, 1979.



Unless otherwise noted, profiles taken at midpoint in cross section.

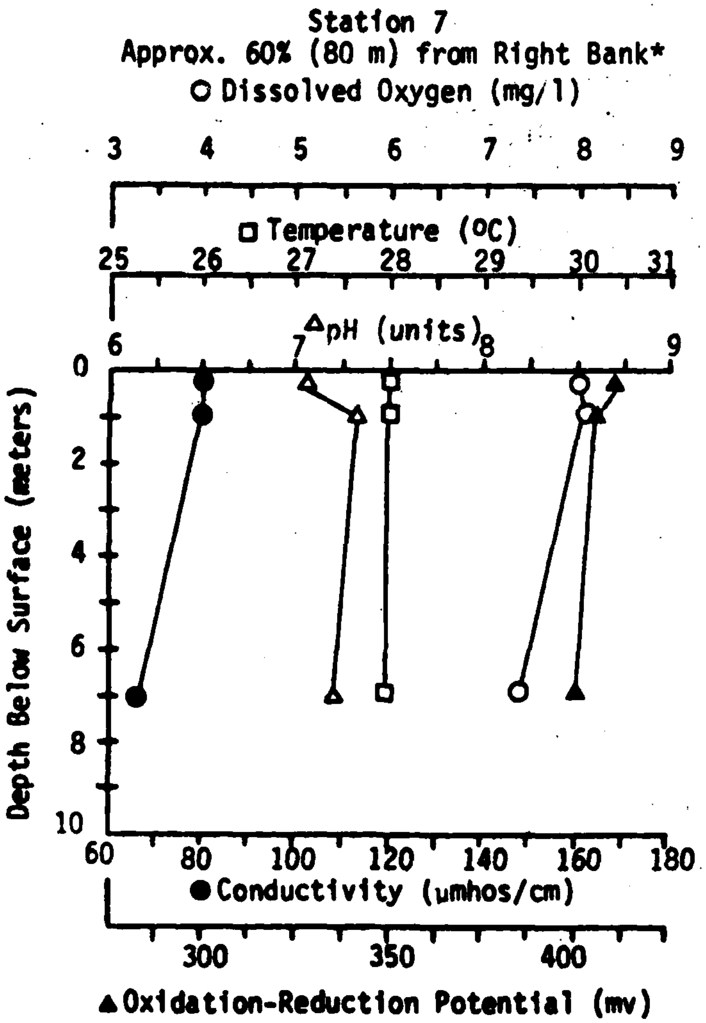
FIGURE F-1d. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 3, JUNE 4-6, 1979.

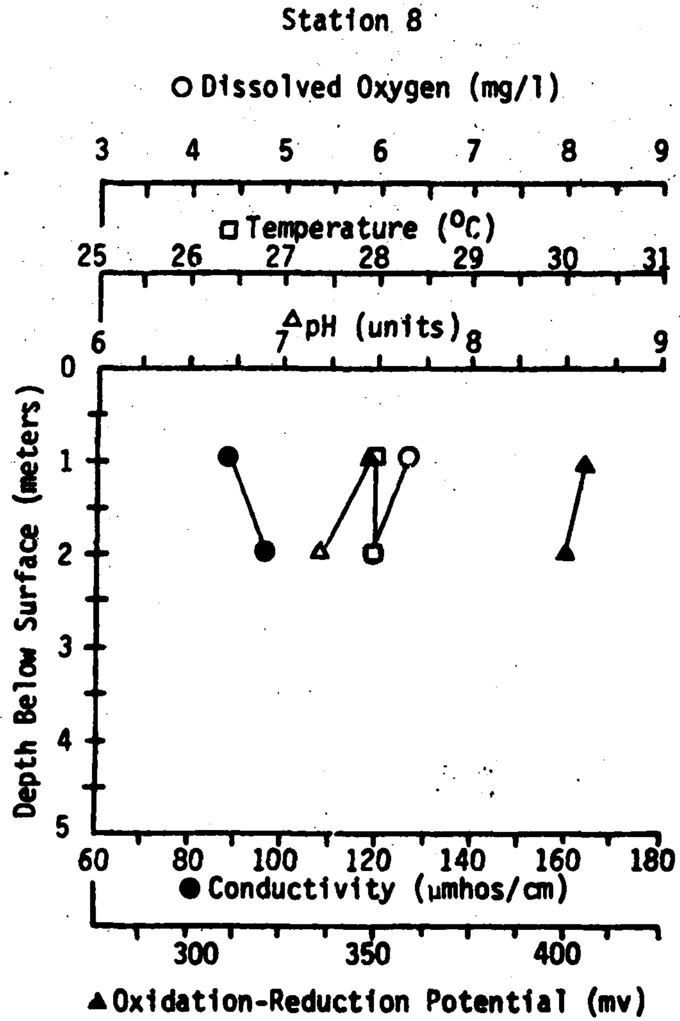
Station 15



Unless otherwise noted, prcfiles taken at midpoint in cross section.

FIGURE F-2a. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 4, JULY 16-19, 1979.

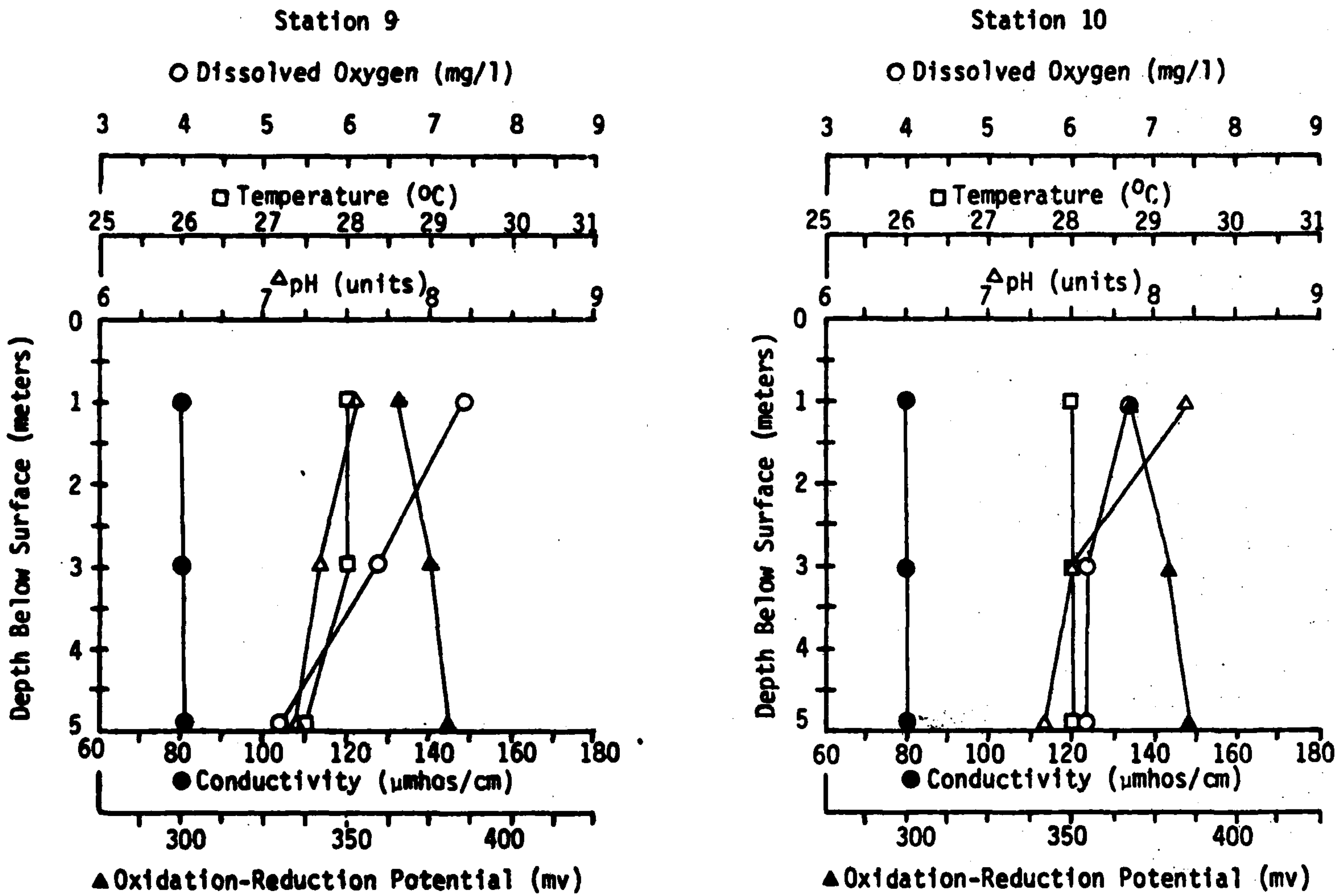




*Distance from Right Bank Facing Upstream

Unless otherwise noted, profiles taken at midpoint in cross section.

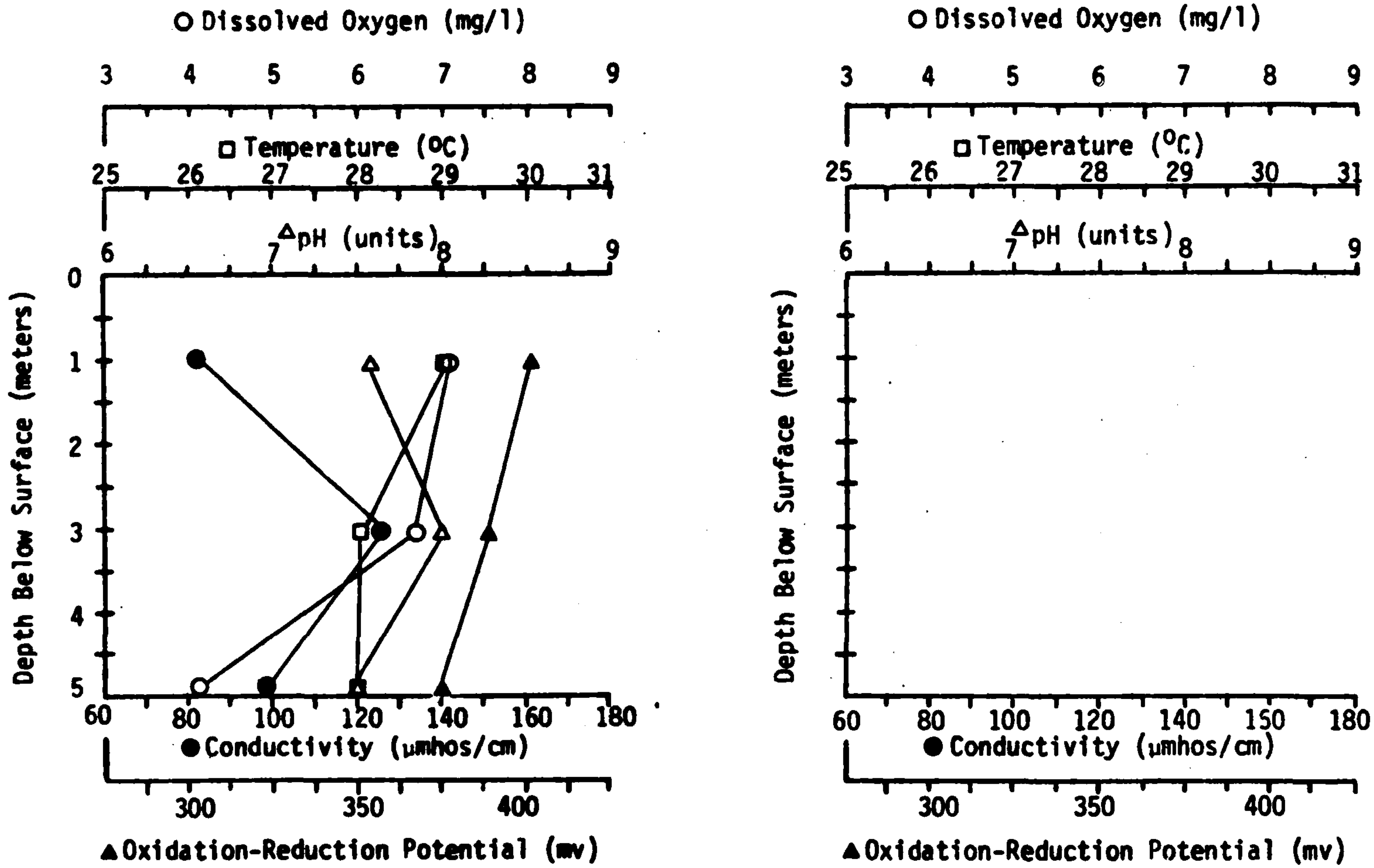
FIGURE F-2b. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN <u>IN SITU</u> CYCLE 4, JULY 16-19, 1979.



Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-2c. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 4, JULY 16-19, 1979.

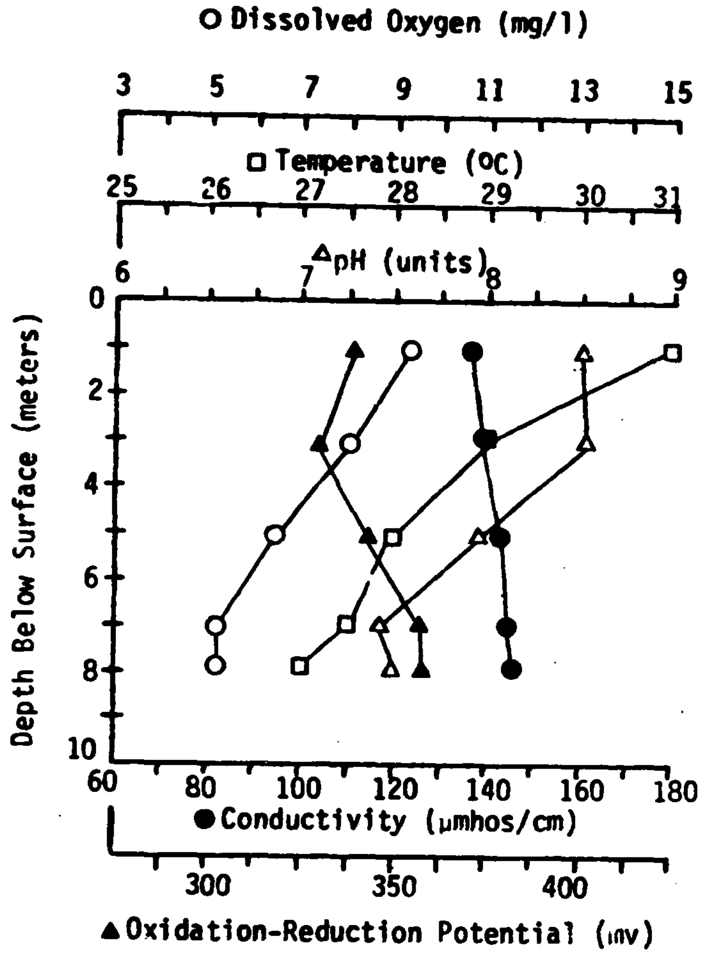
Station 11
Approx. 60% (1100 m) from Right Bank*



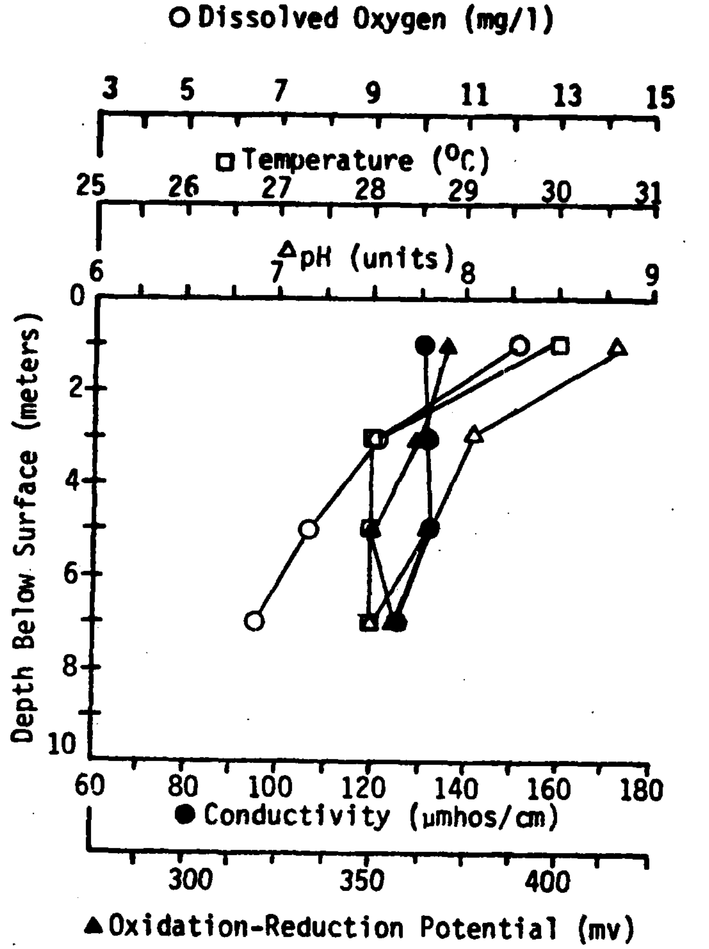
*Distance from Right Bank Facing Upstream
Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-2d. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 4, JULY 16-19, 1979.

Station 13



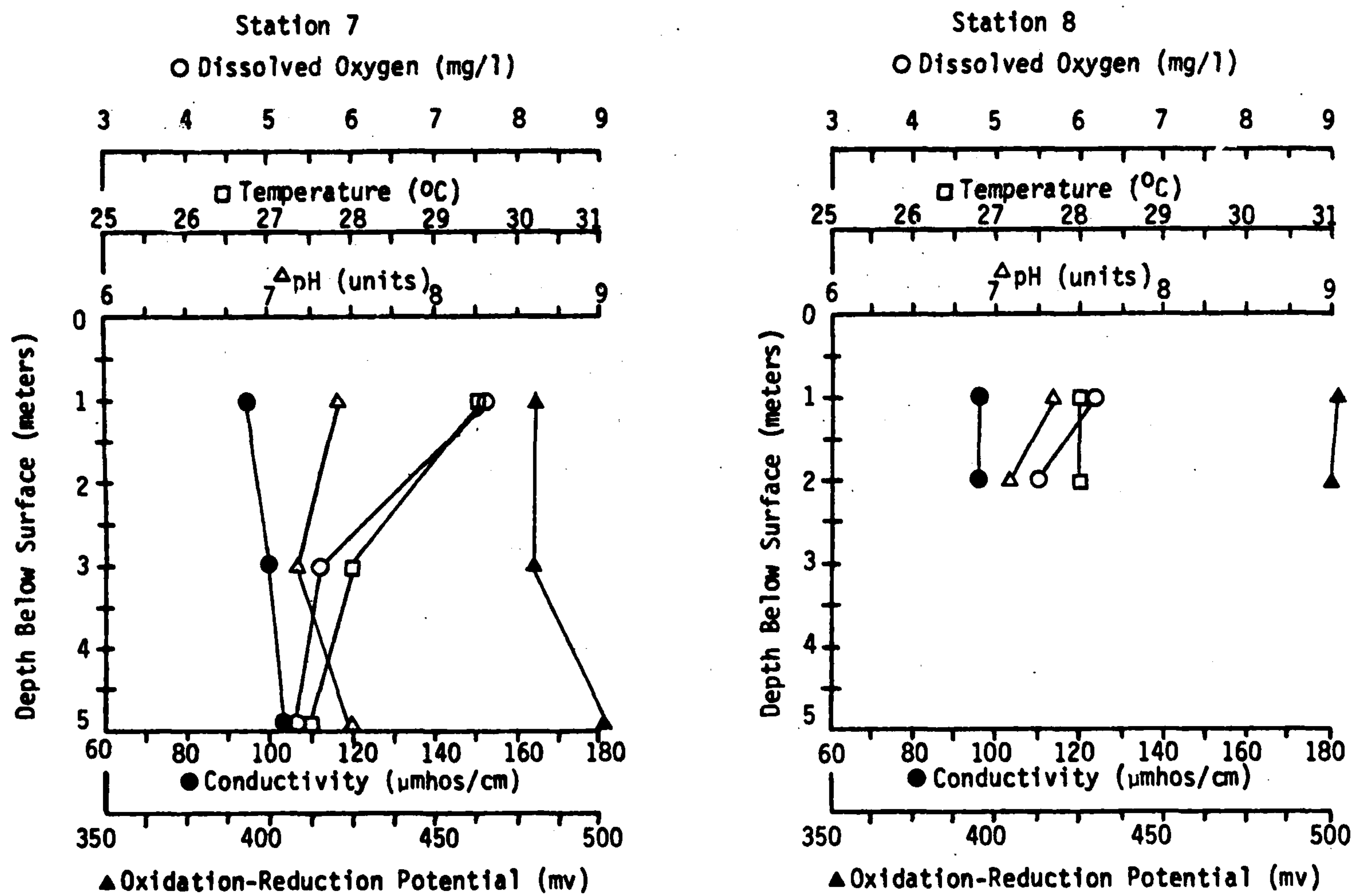
Station 15
Approx. 40% (525 m) from Right Bank*



*Distance from Right Bank Facing Upstream

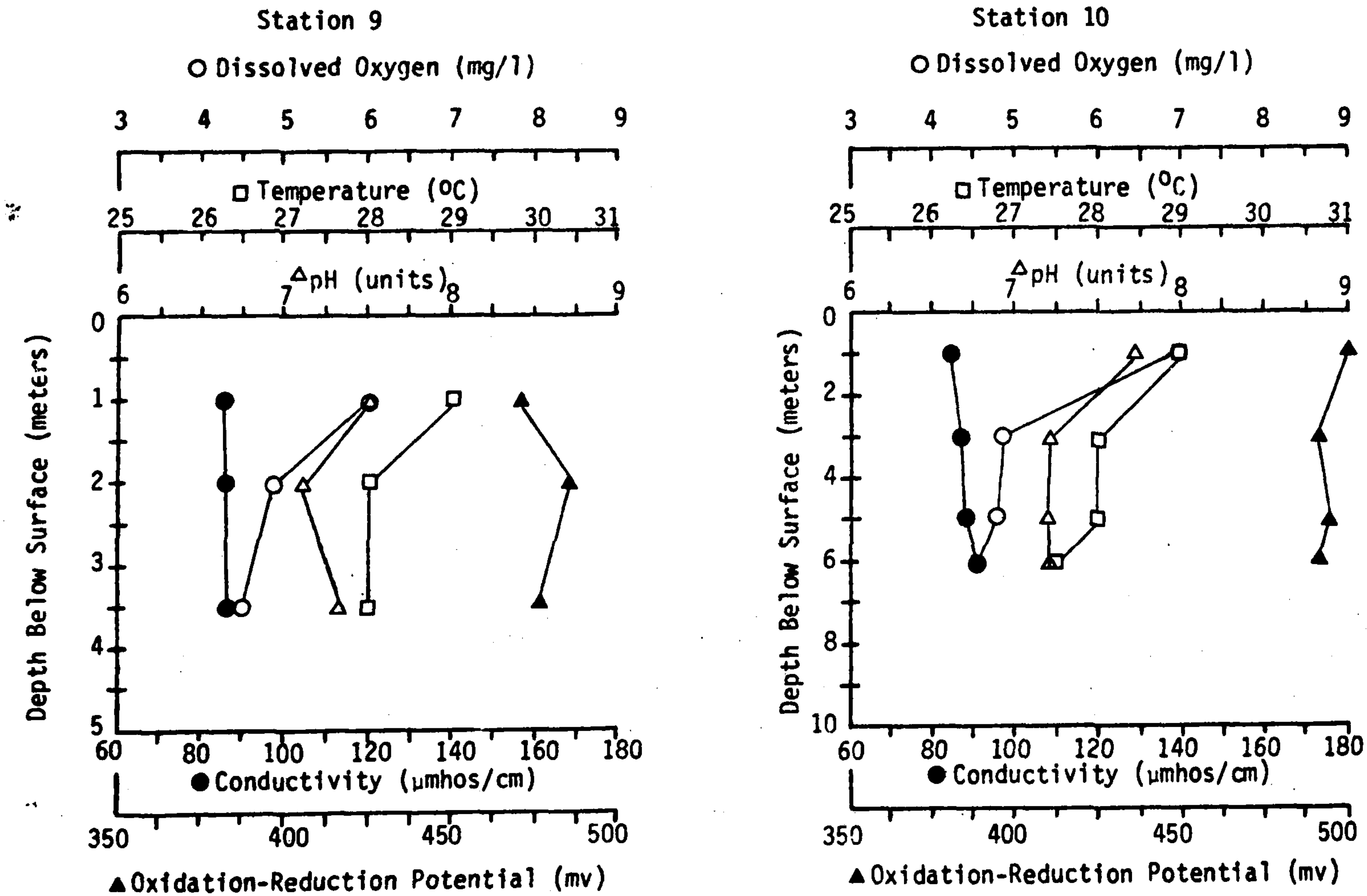
Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-3a. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 5, AUGUST 13-16, 1979.



Unless otherwise noted, profiles taken at midpoint in cross section.

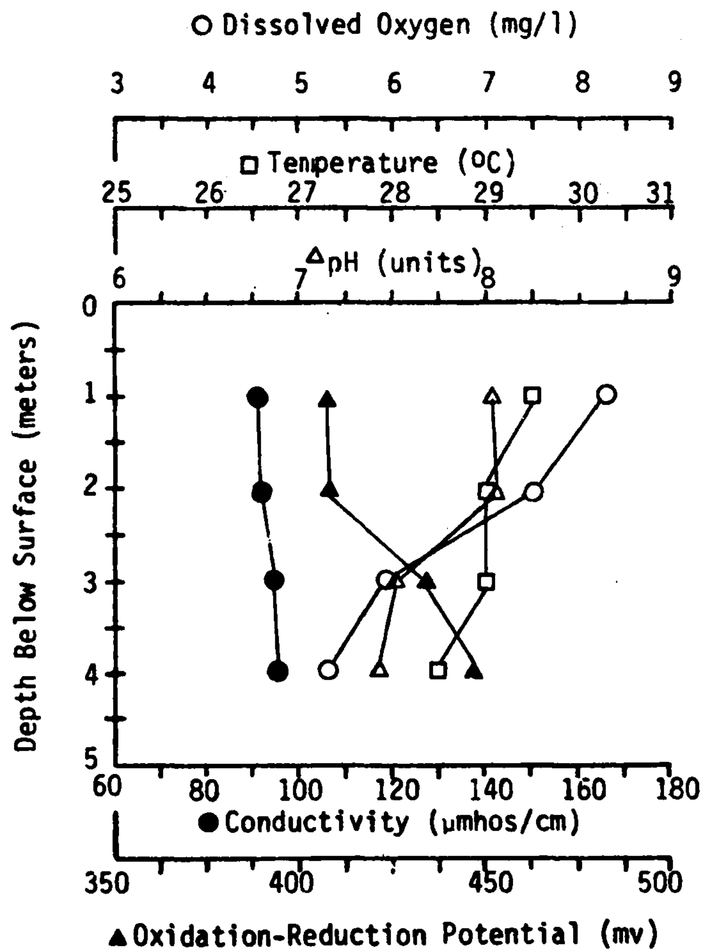
FIGURE F-3b. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 5, AUGUST 13-16, 1979.

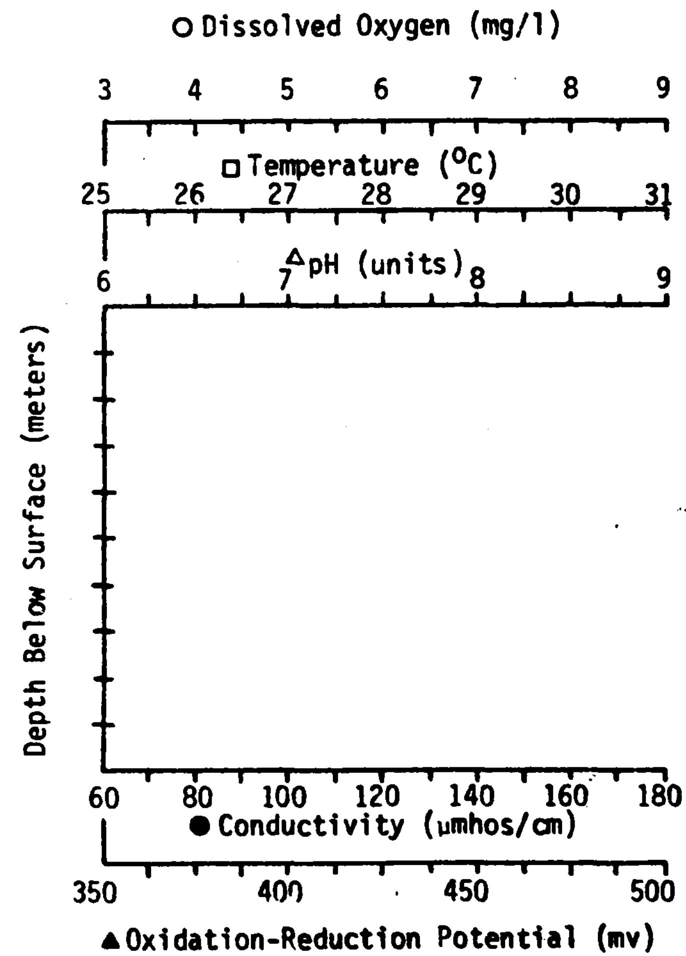


Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-3c. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 5, AUGUST 13-16, 1979.

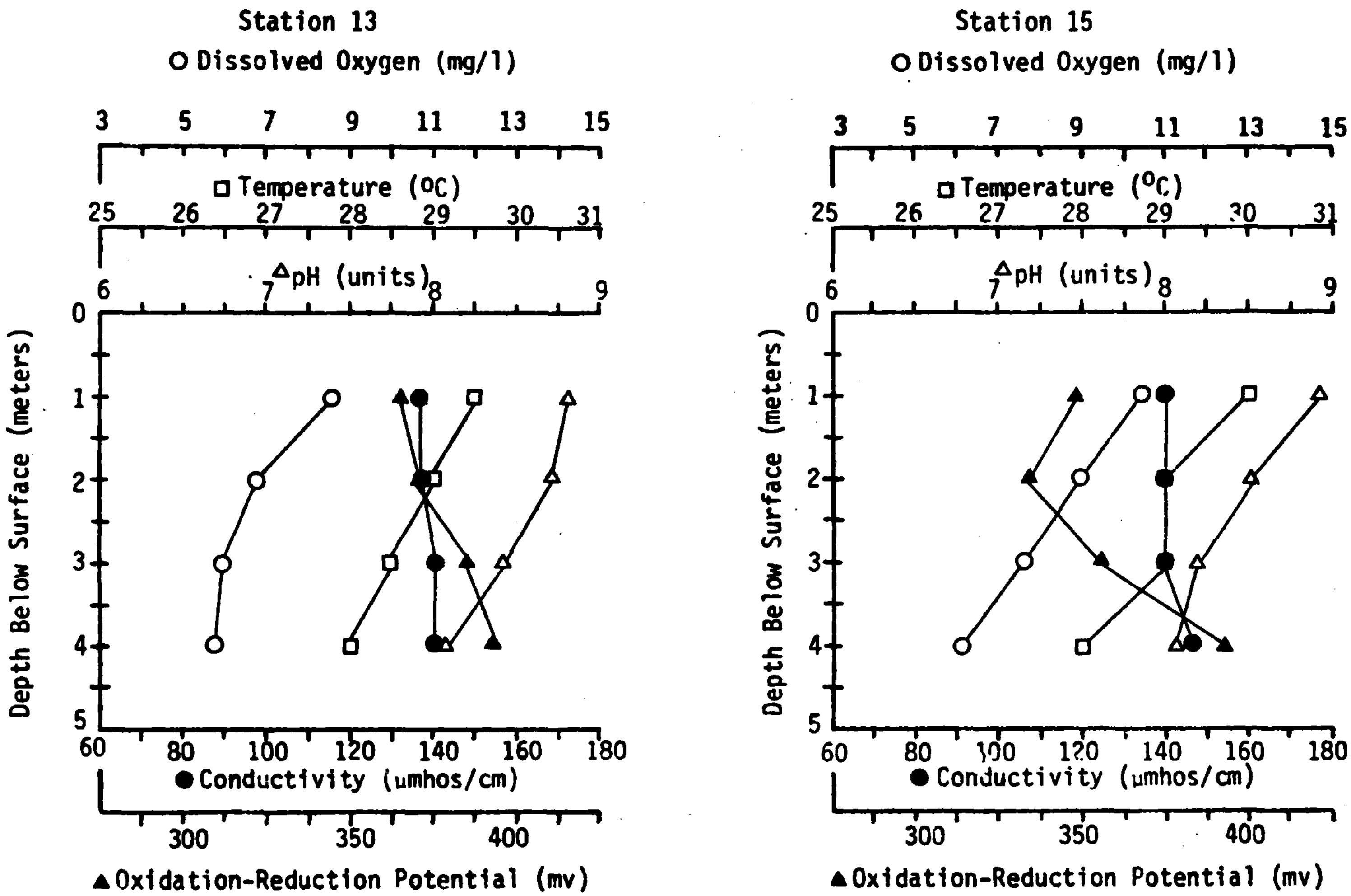
Station 11





Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-3d. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 5, AUGUST 13-16, 1979.



Unless otherwise noted, profiles taken at midpoint in cross section.

FIGURE F-4a DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 6, SEPTEMBER 24-26, 1979

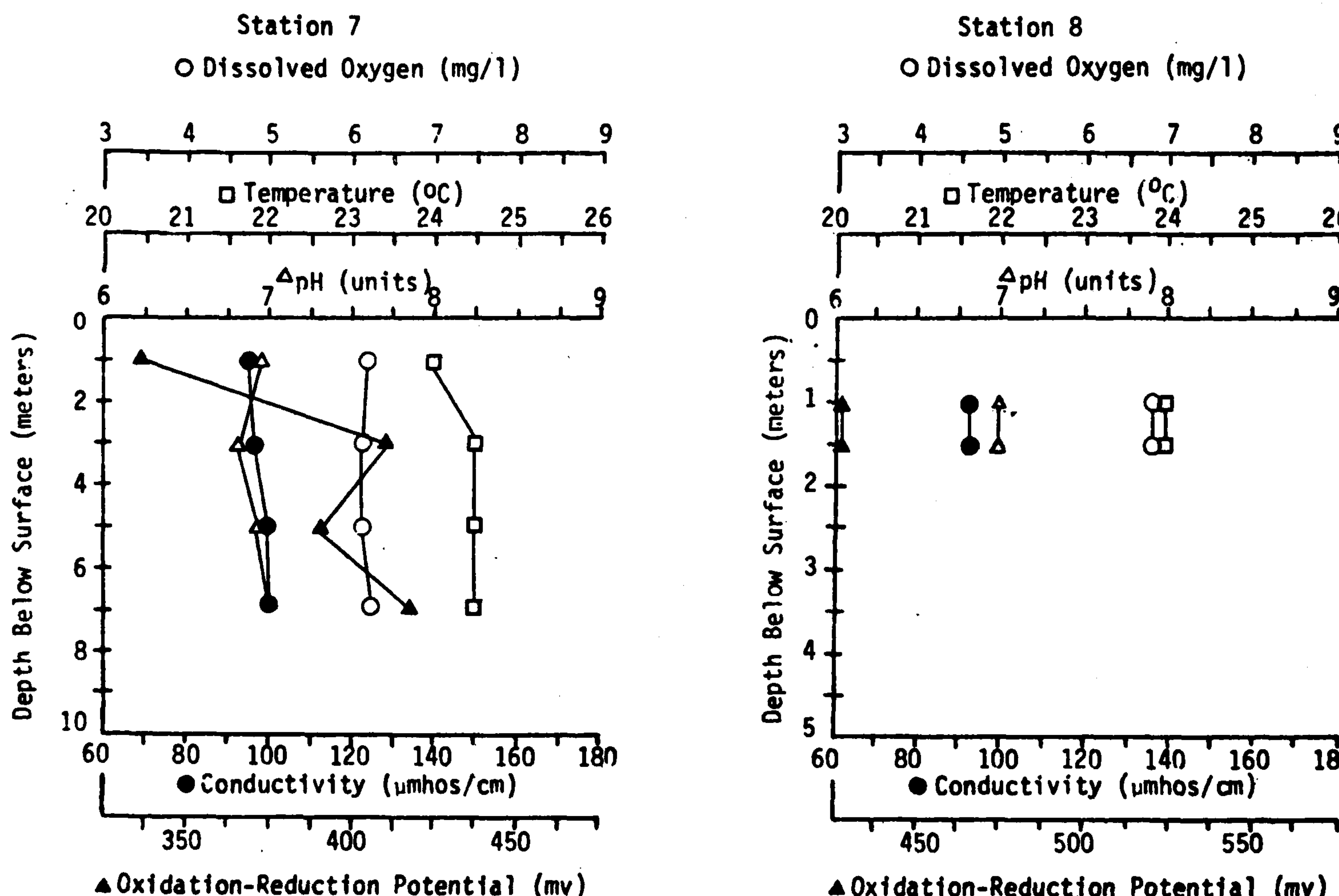


FIGURE F-4b. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 6, SEPTEMBER 24-26, 1979.

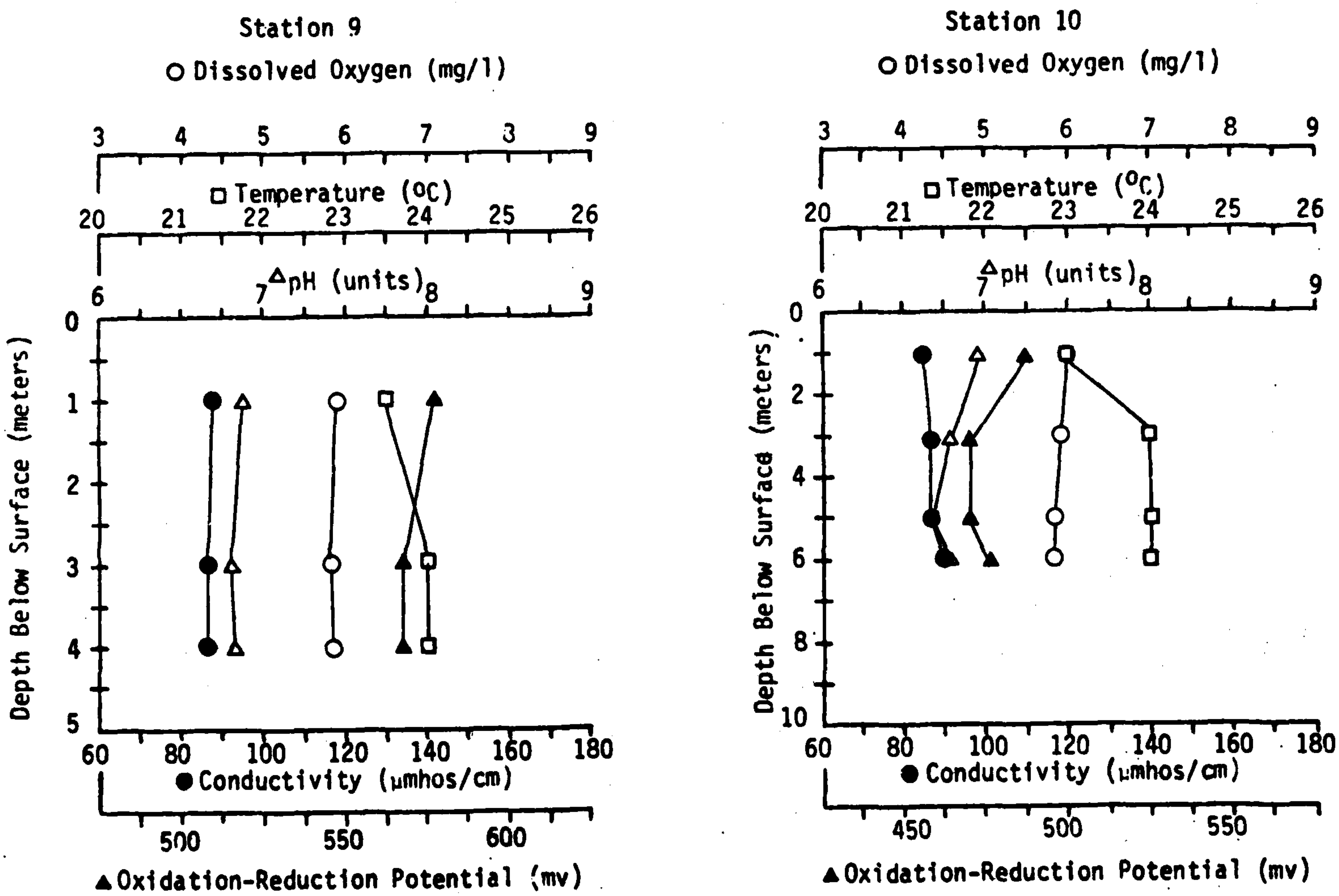


FIGURE F-4c. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 6, SEPTEMBER 24-26, 1979.

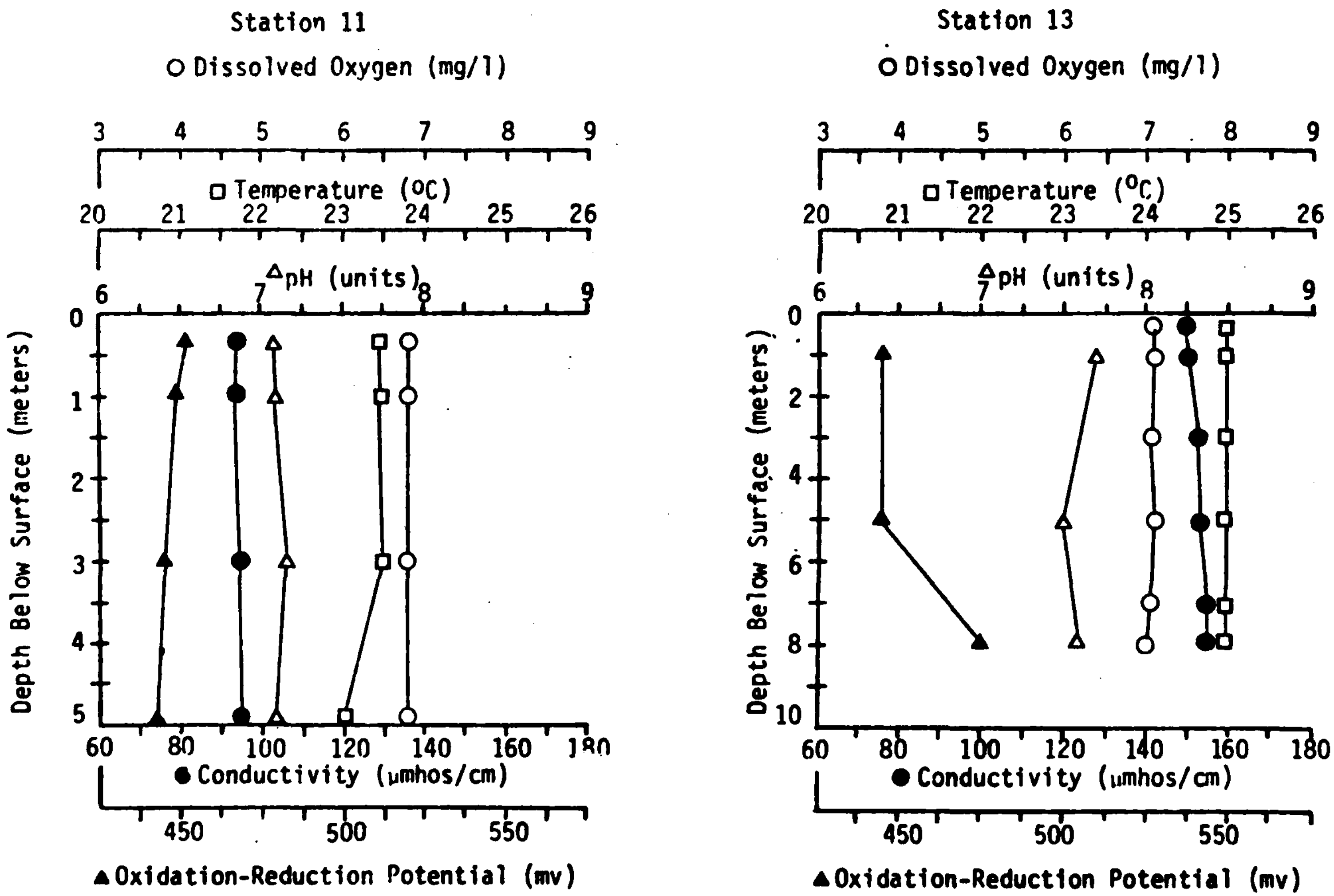


FIGURE F-4d. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 6, SEPTEMBER 24-26, 1979.

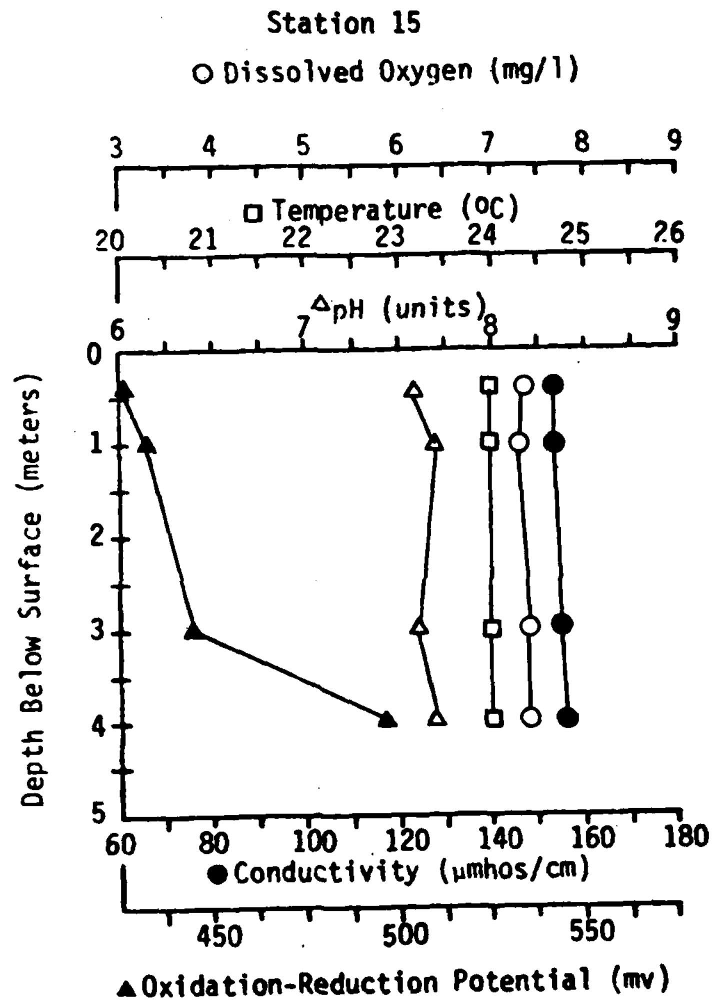


FIGURE F-5a. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 7, DECEMBER 3-6, 1979.

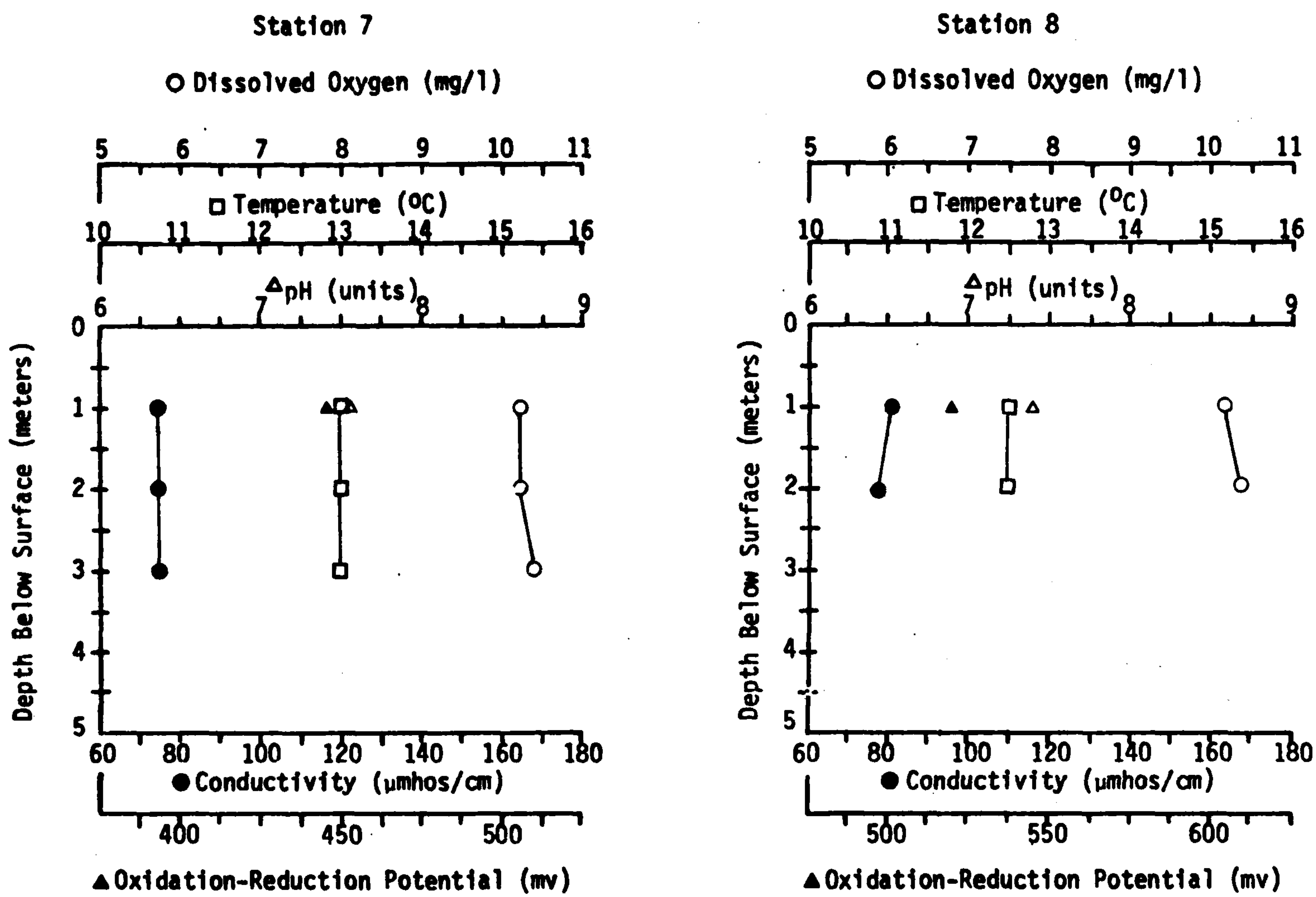


FIGURE F-5b. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 7, DECEMBER 3-6, 1979.

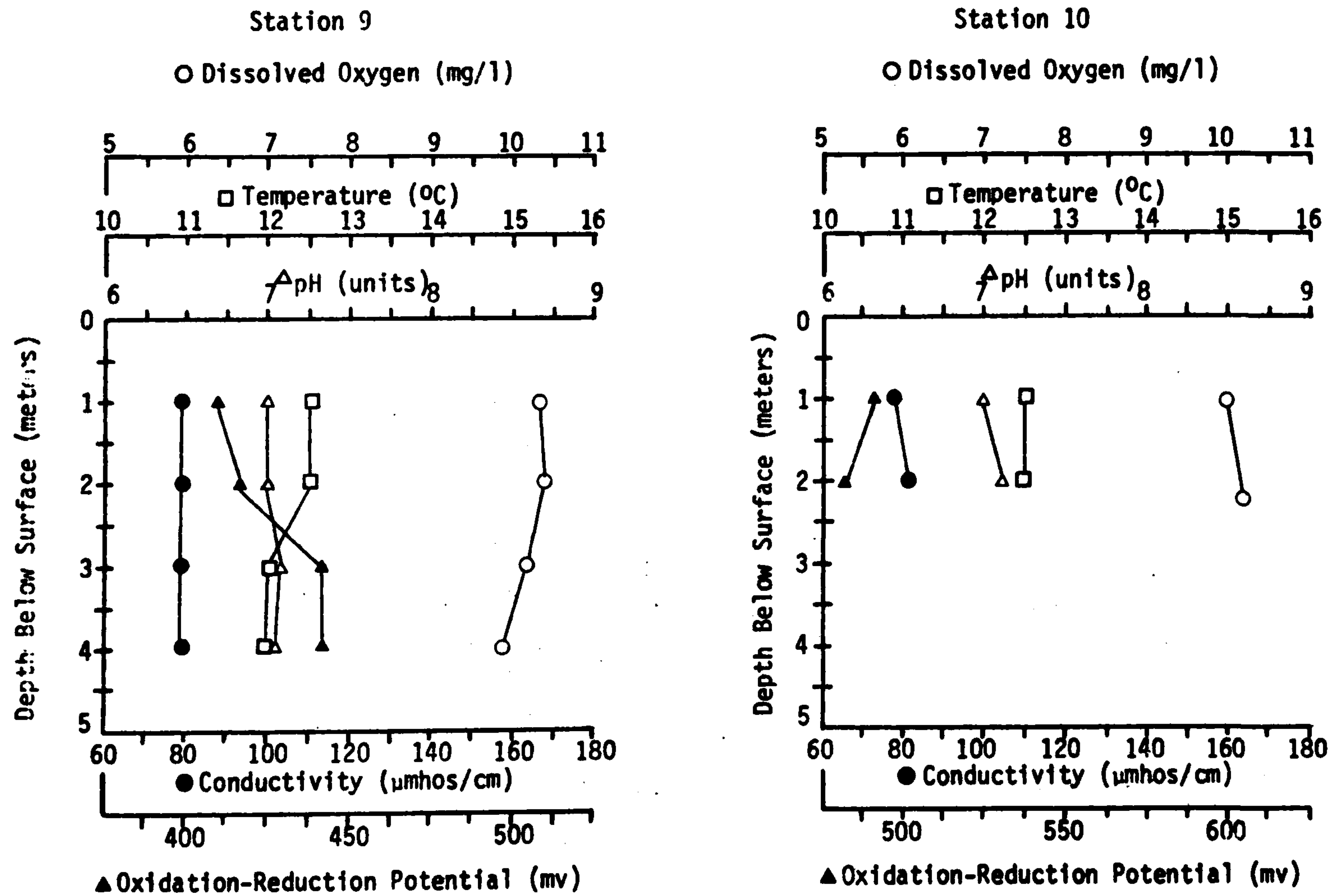
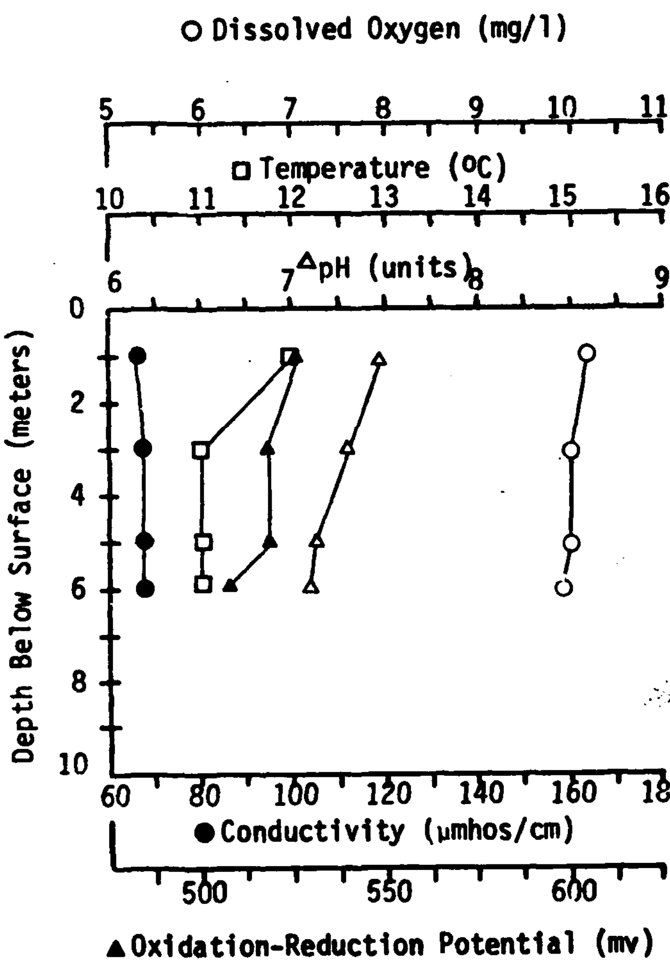


FIGURE F-5c. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN <u>IN SITU</u> CYCLE 7, DECEMBER 3-6, 1979.

Station 11



Station 13

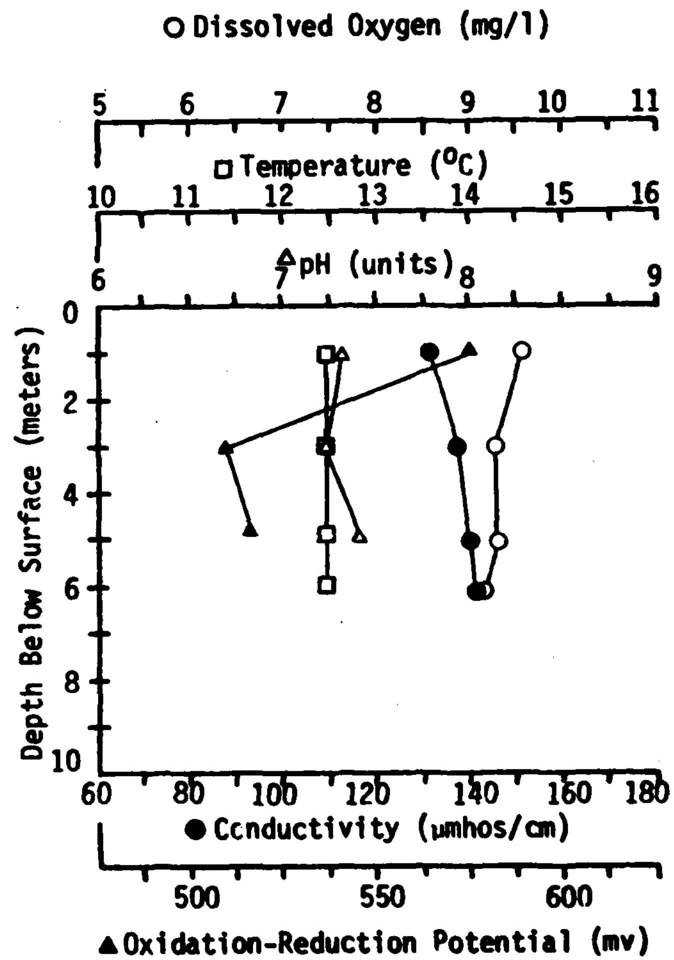


FIGURE F-5d. DISSOLVED OXYGEN, TEMPERATURE, pH, CONDUCTIVITY, AND OXIDATION-REDUCTION POTENTIAL VERTICAL PROFILES, TAKEN IN SITU CYCLE 7, DECEMBER 3-6, 1979.

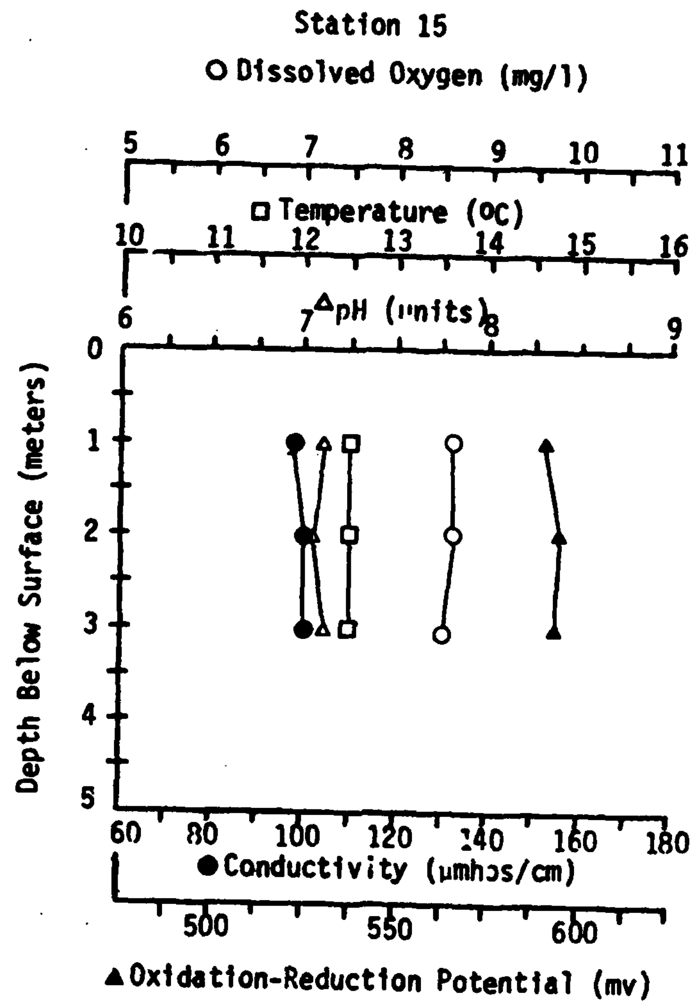
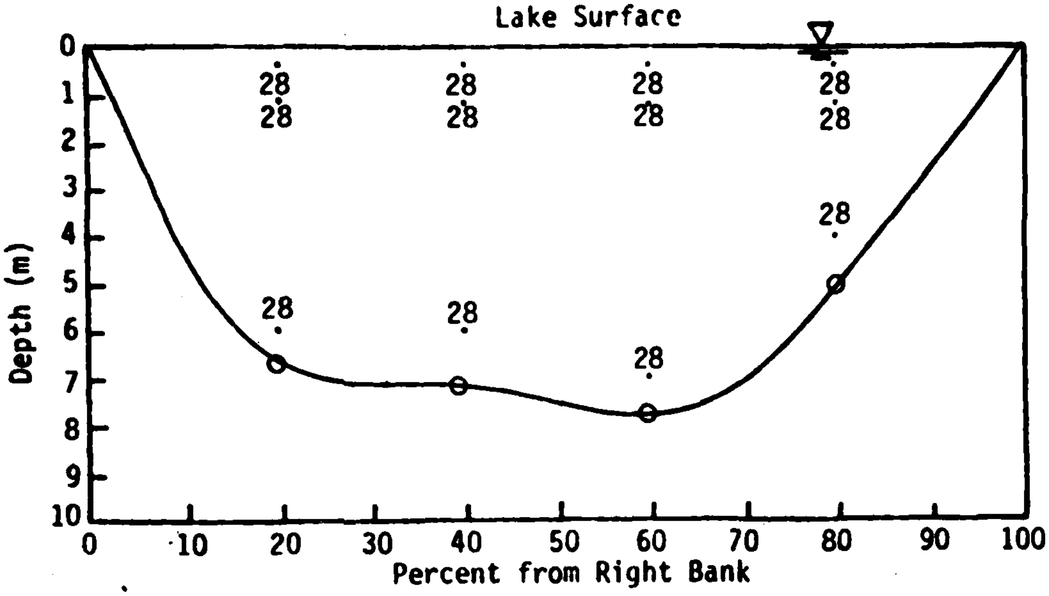


FIGURE F-6a. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 7.

a.) Isotherms (°C)



b.) Dissolved Oxygen (mg/l)

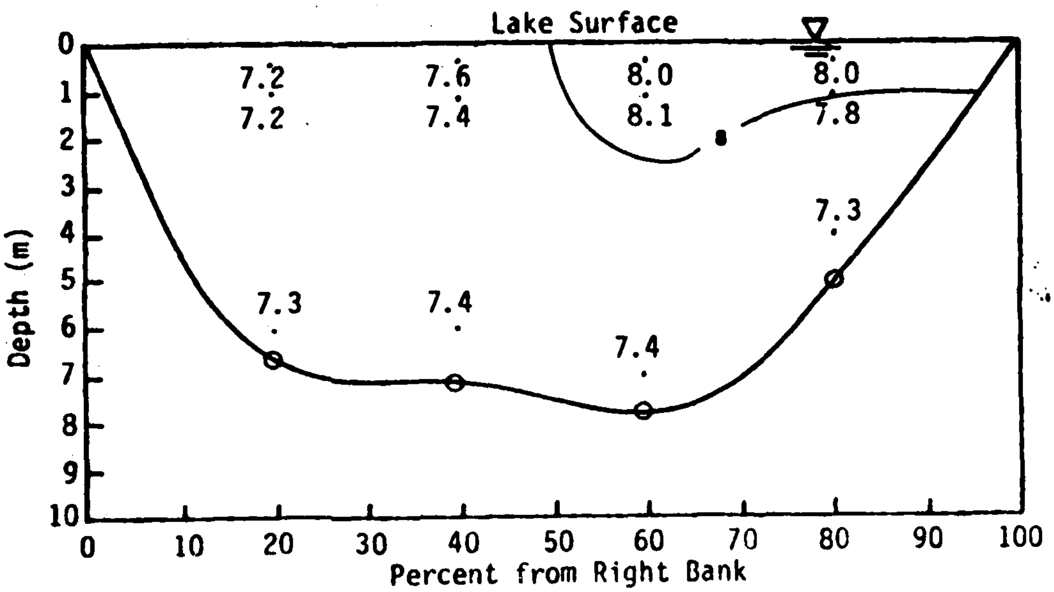
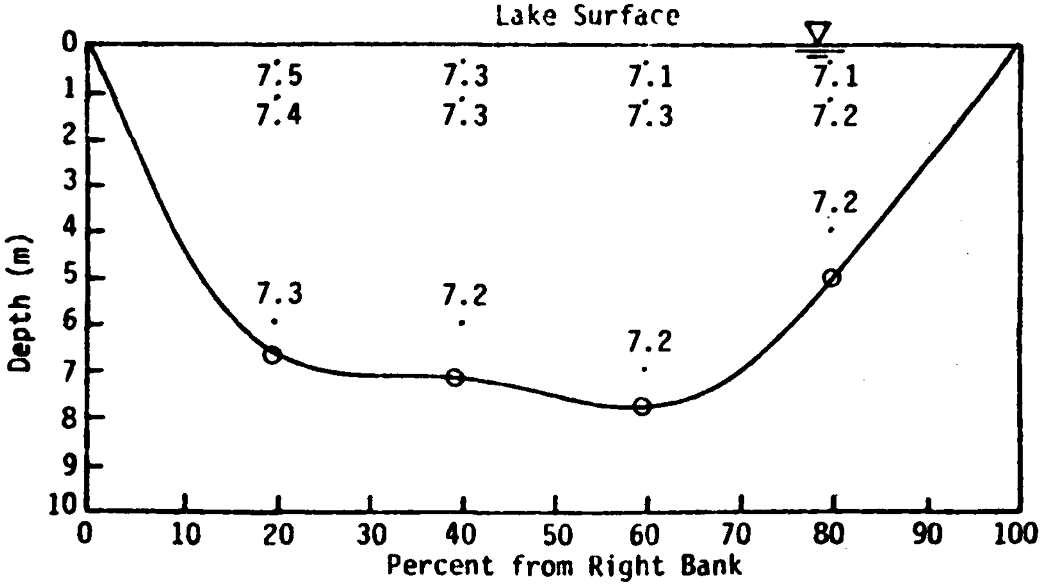


FIGURE F-6b. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 7.

c.) pH



d.) Specific Conductance (μmho/cm @25°C)

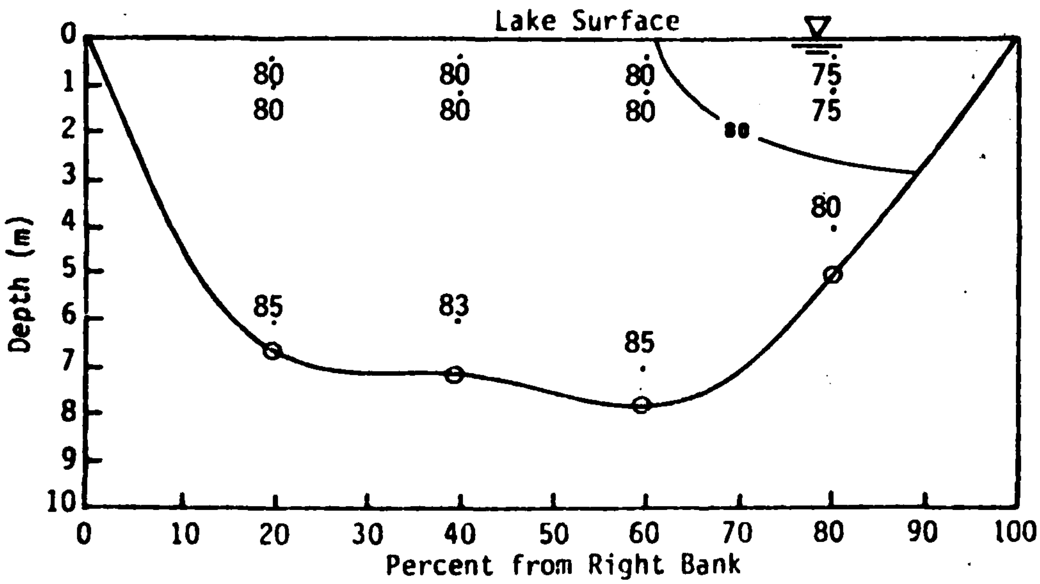


FIGURE F-6c. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 7.

e.) Oxidation Reduction Potential (mv)

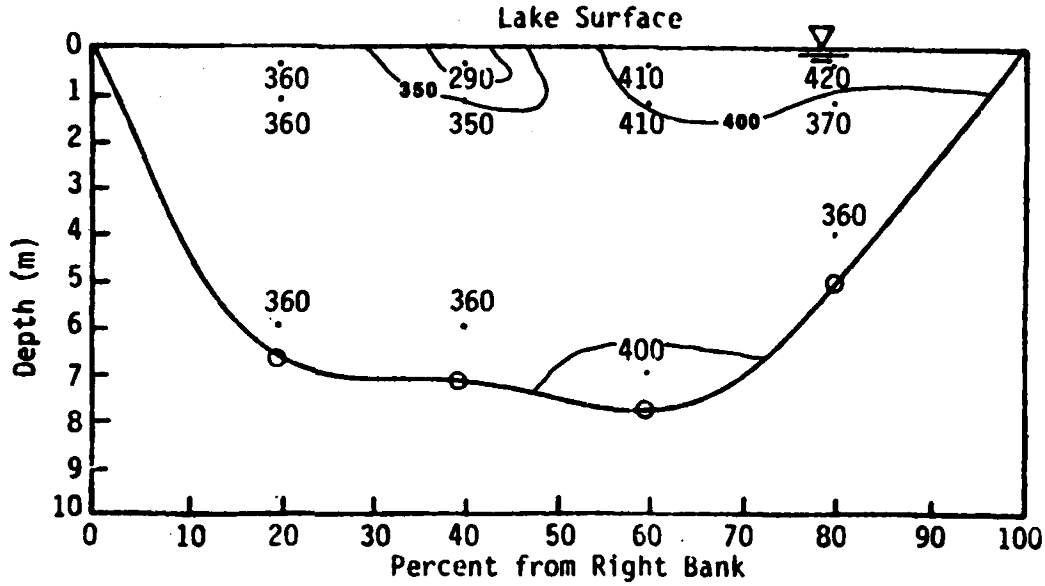
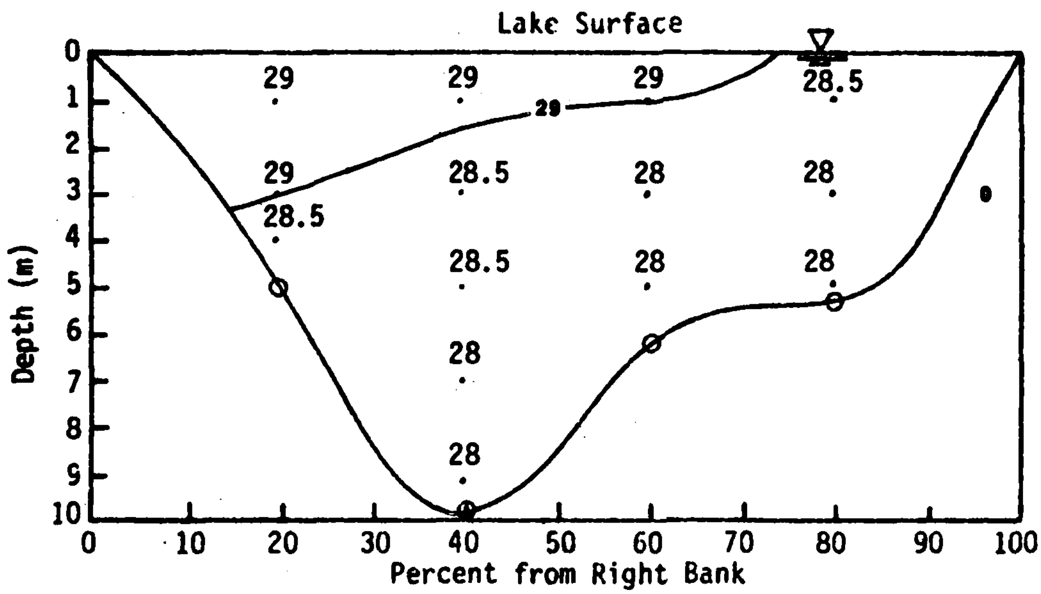


FIGURE F-7a. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 11.

a.) Isotherms (°C)



b.) Dissolved Oxygen (mg/l)

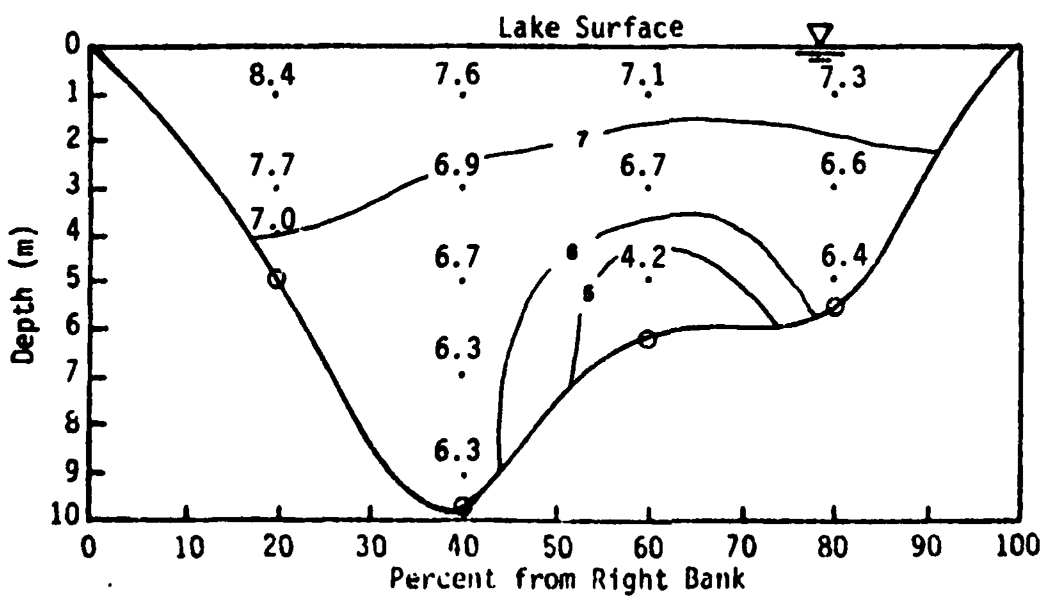
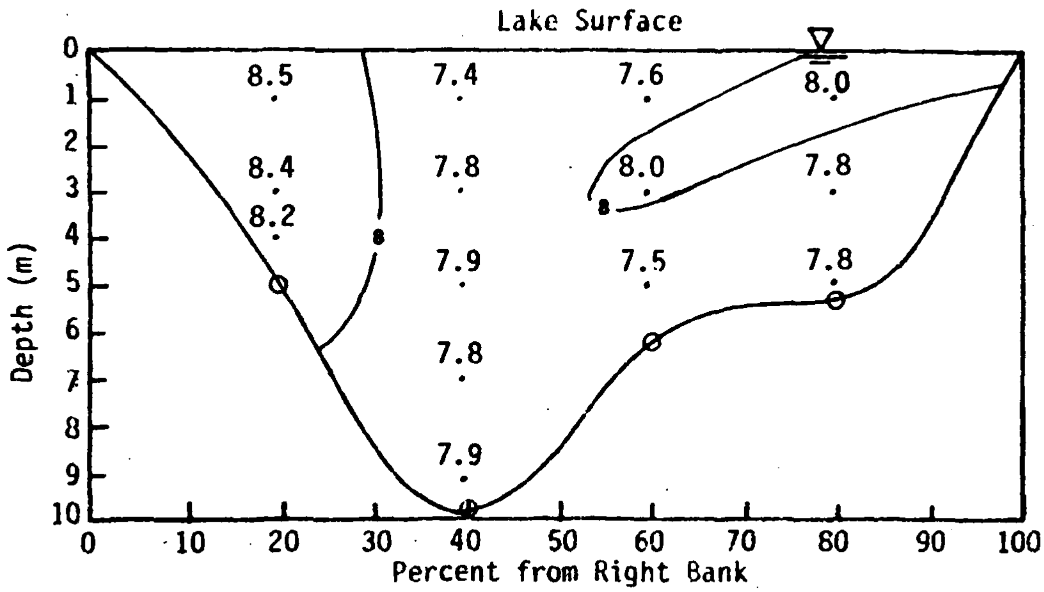


FIGURE F-7b. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 11.

c.) pH



d.) Specific Conductance (μmho/cm @25°C)

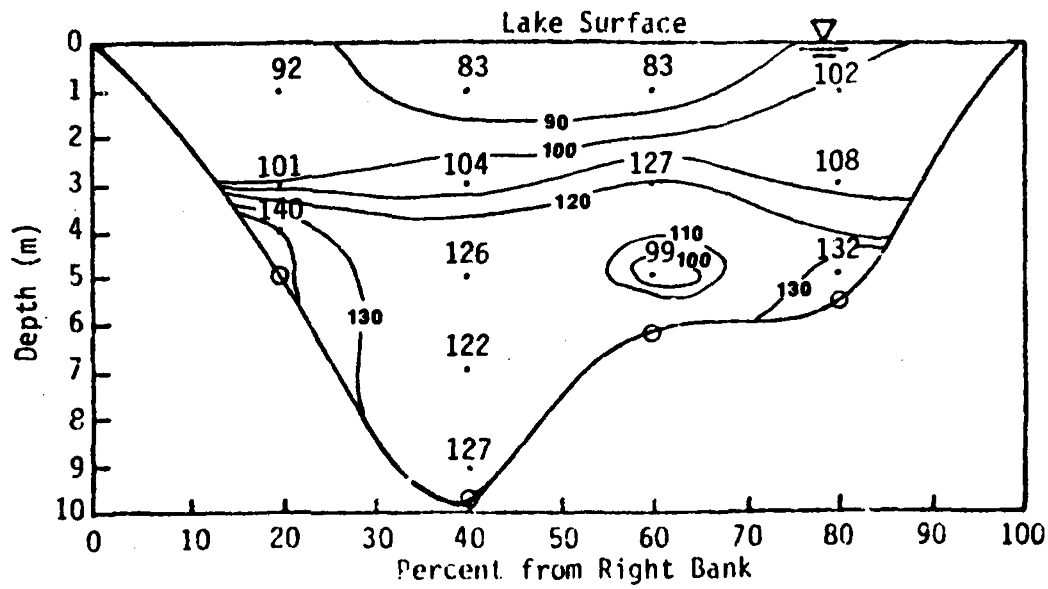


FIGURE F-7d. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 11.

e.) Oxidation Reduction Potential (mv)

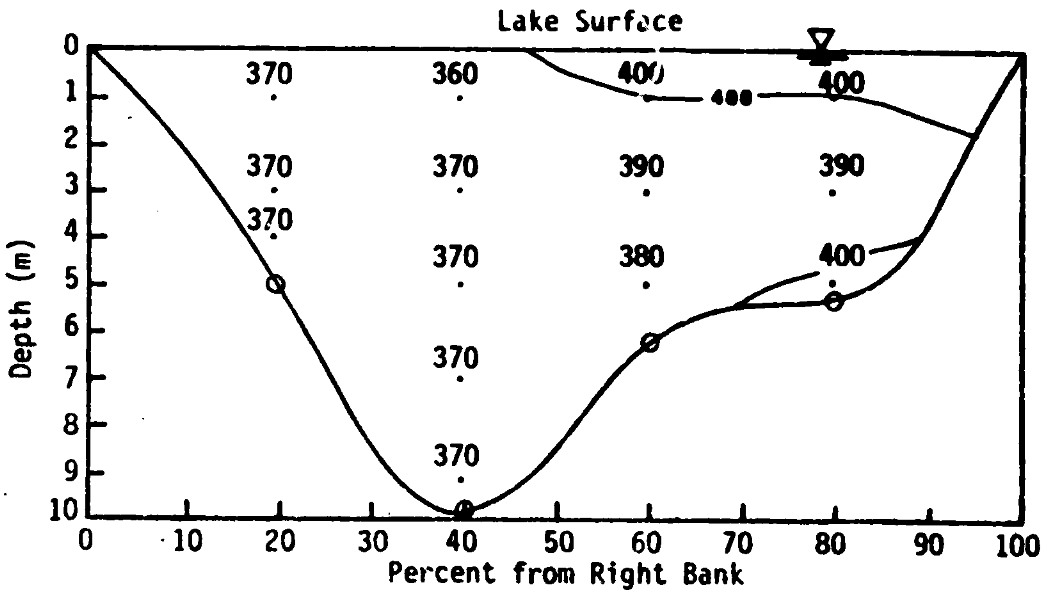
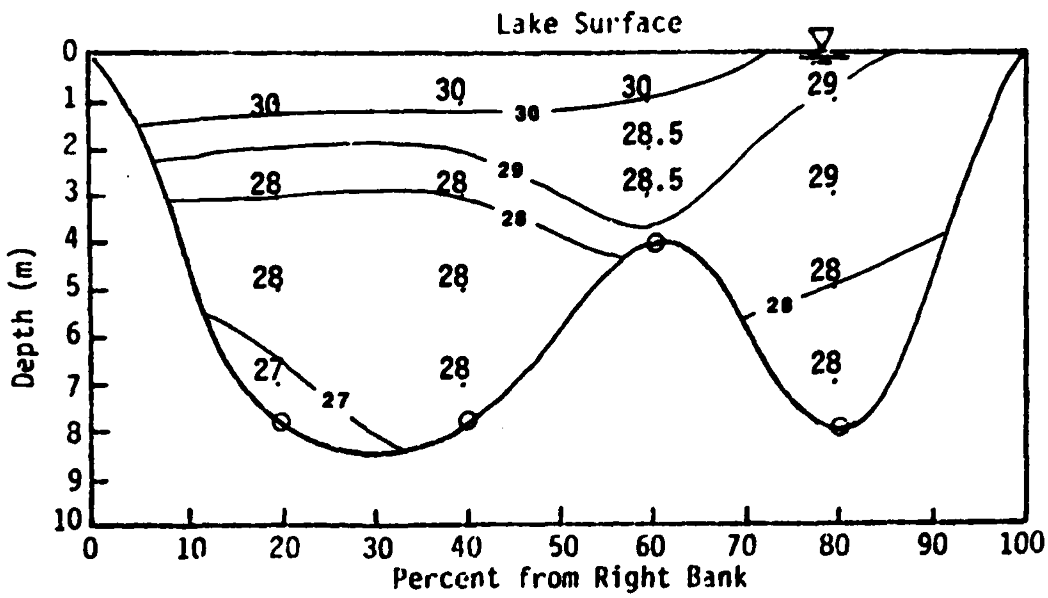


FIGURE F-8a. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 15.

a.) Isotherms (^oC)



b.) Dissolved Oxygen (mg/l)

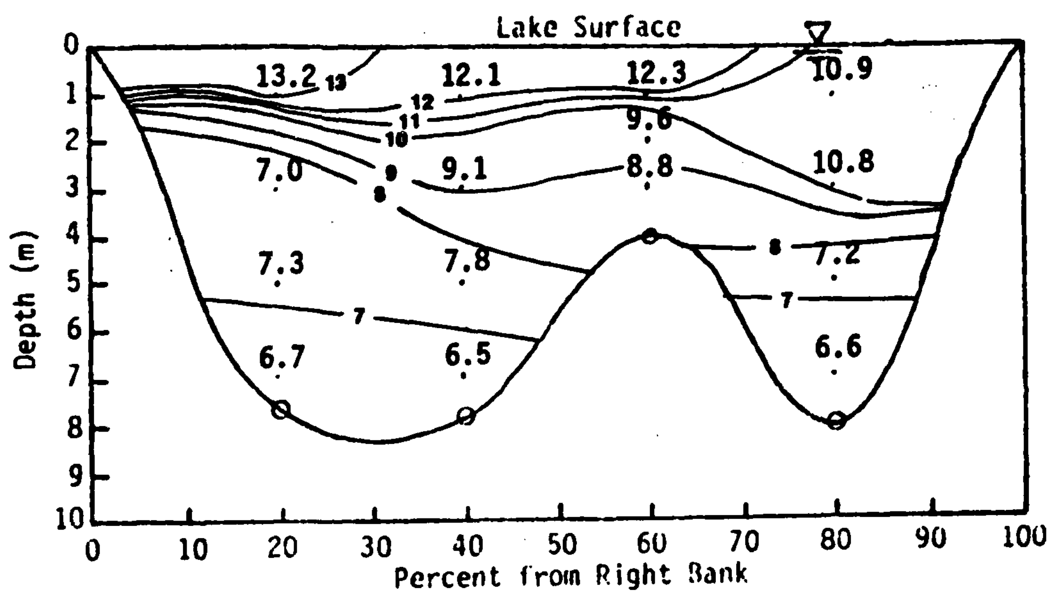
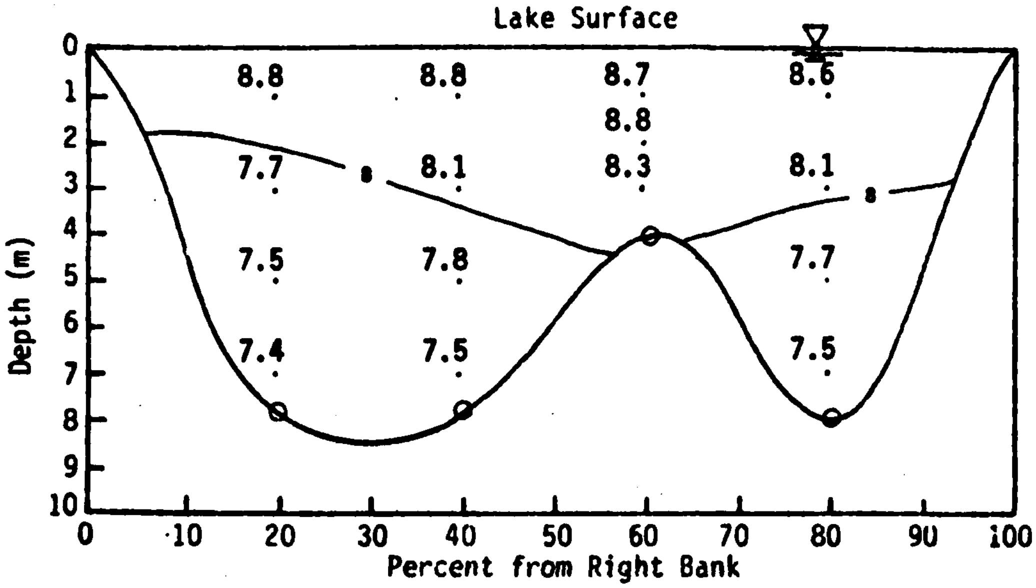


FIGURE F-8b. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 15.

c.) pH



d.) Specific Conductance (μmho/cm @25°C)

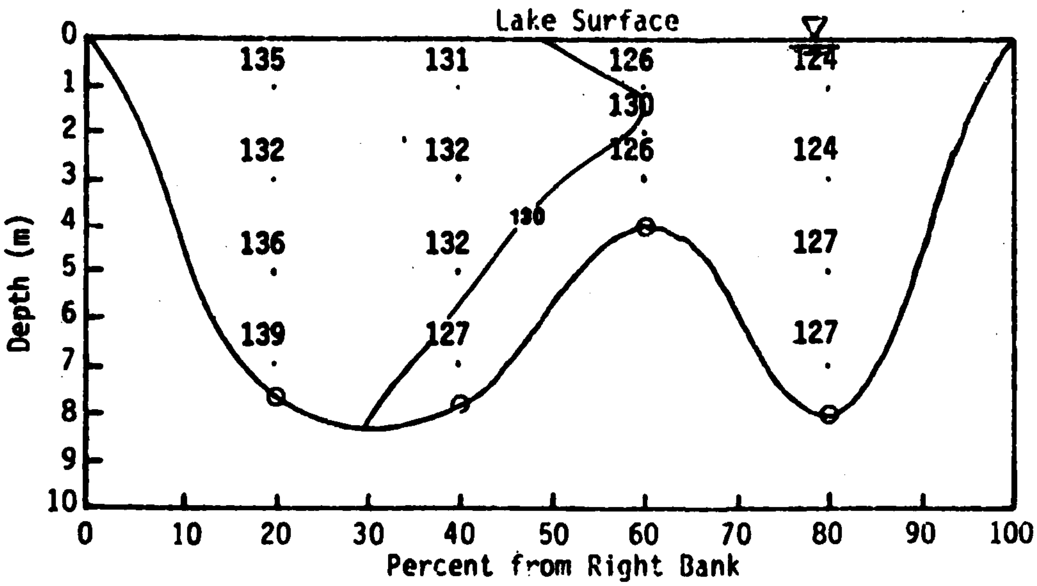
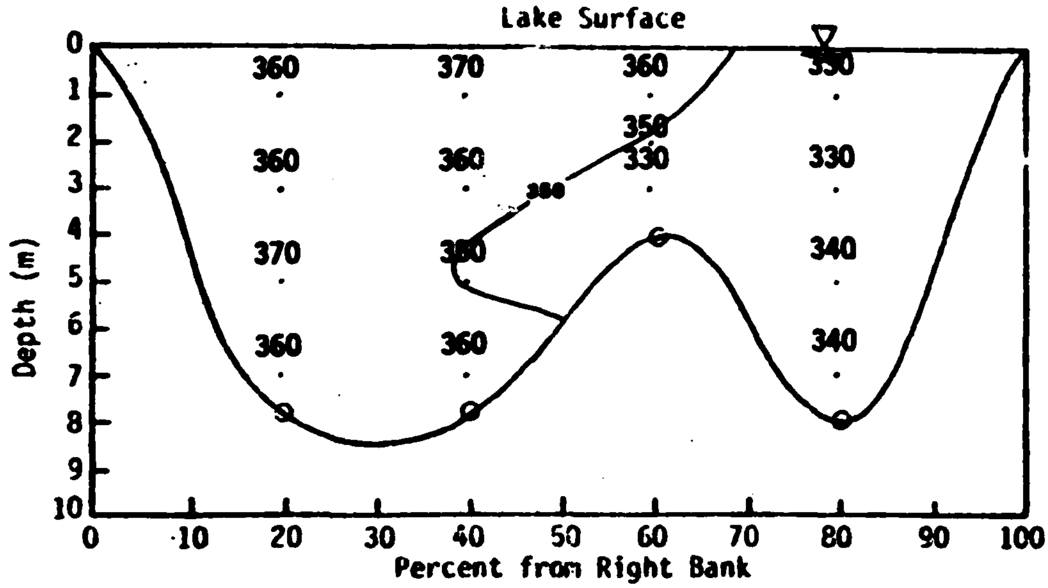


FIGURE F-8c. TEMPERATURE, DISSOLVED OXYGEN, pH, SPECIFIC CONDUCTANCE, AND OXIDATION-REDUCTION POTENTIAL ISOPLETHS TAKEN IN SITU, CYCLE 4, JULY 16-19, 1979 AT STATION 15.

e.) Oxidation Reduction Potential (mv)



APPENDIX G

ALGAL GROWTH POTENTIAL TEST RESULTS

LIST OF TABLES

TABLE G-1a

ALGAL GROWTH POTENTIAL

Cycle 2 Station 6 Date Collected 4/4/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	8.23	8.19	7.37	7.93 ± 0.97	7.57	8.09	7.57	7.74 ± 0.60	7.84 ± 0.75
LW+P	15.6	14.9	11.3	13.9 ± 4.61	15.4	15.3	15.4	15.4 ± 0.12	14.7 ± 3.31
LW+N	8.08	8.16	8.18	8.14 ± 0.11	7.76	8.18	8.22	8.05 ± 0.51	8.10 ± 0.34
LW+P+N	30.5	30.9	28.9	30.1 ± 2.12	30.2	30.8	28.5	29.8 ± 2.39	30.0 ± 2.04
LW+E	7.69	7.73	7.86	7.76 ± 0.18	7.35	7.17	7.13	7.22 ± 0.23	7.49 ± 0.62
LW+P+E	15.5	15.5	15.4	15.5 ± 0.12	14.9	14.2	14.5	14.5 ± 0.70	15.0 ± 1.12
LW+N+E	7.77	8.21	8.61	8.20 ± 0.84	7.85	7.97	7.85	7.89 ± 0.14	8.04 ± 0.53
LW+P+N+E	29.0	28.6	31.5	29.7 ± 3.14	28.7	30.7	30.9	30.1 ± 2.43	29.9 ± 2.55

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.2	7.2
Specific Conductance (μmho cm^{-1})	65	73
Total Kjeldahl Nitrogen (mg N l^{-1})	0.62	0.38
NH_3-N (mg N l^{-1})	0.02	<0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.342	0.405
Dissolved Ortho-phosphate (mg P l^{-1})	0.010	0.019
Total Phosphorus (mg P l^{-1})	0.043	0.036

TABLE G-1b

ALGAL GROWTH POTENTIAL

Cycle 2 Station 7 Date Collected 4/3/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	5.64	5.93	5.79	5.79 ± 0.29	6.23	6.39	6.19	6.27 ± 0.21	6.03 ± 0.58
LW+P	14.8	14.7	15.3	14.9 ± 0.64	14.8	14.2	16.2	15.1 ± 2.07	15.0 ± 1.37
LW+N	6.40	6.30	6.24	6.31 ± 0.16	6.10	5.69	6.04	5.94 ± 0.44	6.13 ± 0.50
LW+P+N	26.5	26.8	26.6	26.6 ± 0.31	27.7	28.0	28.6	28.1 ± 0.92	27.4 ± 1.72
LW+E	6.60	6.50	6.48	6.53 ± 0.13	6.23	6.02	6.05	6.10 ± 0.23	6.31 ± 0.50
LW+P+E	14.5	14.4	15.4	14.8 ± 1.10	15.0	14.9	15.8	15.2 ± 0.99	15.0 ± 1.07
LW+N+E	5.76	5.91	5.89	5.85 ± 0.16	6.49	6.57	6.41	6.49 ± 0.16	6.17 ± 0.71
LW+P+N+E	27.4	27.7	28.5	27.9 ± 1.14	27.9	27.9	27.6	27.8 ± 0.35	27.8 ± 0.76

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.3	7.2
Specific Conductance (μmho cm^{-1})	75	83
Total Kjeldahl Nitrogen (mg N l^{-1})	0.78	0.46
NH_3-N (mg N l^{-1})	<0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.358	0.394
Dissolved Ortho-phosphate (mg P l^{-1})	0.008	0.015
Total Phosphorus (mg P l^{-1})	0.038	0.031

TABLE G-1c

ALGAL GROWTH POTENTIAL

Cycle 2 Station 9 Date Collected 4/3/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	7.39	6.97	7.15	7.17 ± 0.42	7.08	7.50	7.06	7.21 ± 0.50	7.19 ± 0.41
LW+P	11.9	12.0	12.1	12.0 ± 0.20	12.5	11.8	12.8	12.4 ± 1.03	12.2 ± 0.77
LW+N	7.46	7.27	7.47	7.40 ± 0.23	7.25	7.10	7.03	7.13 ± 0.22	7.26 ± 0.36
LW+P+N	28.1	28.1	27.3	27.8 ± 0.92	28.2	27.8	28.1	28.0 ± 0.42	27.9 ± 0.68
LW+E	7.15	7.51	7.52	7.39 ± 0.42	7.31	7.25	7.03	7.20 ± 0.29	7.30 ± 0.39
LW+P+E	11.9	11.8	12.0	11.9 ± 0.20	12.8	11.8	12.7	12.4 ± 1.10	12.2 ± 0.92
LW+N+E	7.27	7.12	7.14	7.18 ± 0.16	7.11	7.66	6.98	7.25 ± 0.72	7.21 ± 0.47
LW+P+N+E	27.0	27.7	29.1	27.9 ± 2.14	27.9	28.3	28.4	28.2 ± 0.53	28.1 ± 1.42

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.4	7.4
Specific Conductance (μmho cm^{-1})	74	78
Total Kjeldahl Nitrogen (mg N l^{-1})	0.61	0.49
NH_3-N (mg N l^{-1})	<0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.266	0.300
Dissolved Ortho-phosphate (mg P l^{-1})	0.009	0.017
Total Phosphorus (mg P l^{-1})	0.047	0.038

TABLE G-1d

ALGAL GROWTH POTENTIAL

Cycle 2 Station 10 Date Collected 4/3/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	7.05	7.51	7.44	7.33 ± 0.50	7.55	7.34	7.30	7.40 ± 0.27	7.37 ± 0.36
LW+P	11.3	11.8	11.6	11.6 ± 0.50	12.2	11.8	12.2	12.1 ± 0.46	11.8 ± 0.70
LW+N	7.65	7.37	7.24	7.42 ± 0.42	7.11	7.19	7.44	7.25 ± 0.34	7.33 ± 0.39
LW+P+N	28.8	29.4	28.5	28.9 ± 0.92	30.8	28.7	30.7	30.1 ± 2.37	29.5 ± 2.05
LW+E	7.22	7.22	7.30	7.25 ± 0.09	6.80	6.73	6.72	6.75 ± 0.09	7.00 ± 0.55
LW+P+E	11.9	12.1	11.1	11.7 ± 1.06	13.4	11.7	13.1	12.7 ± 1.81	12.2 ± 1.75
LW+N+E	7.48	7.47	7.59	7.51 ± 0.13	6.48	6.85	7.25	6.86 ± 0.77	7.19 ± 0.87
LW+P+N+E	29.2	29.7	29.7	29.5 ± 0.58	26.1	29.9	32.5	29.5 ± 6.44	29.5 ± 4.09

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.3	7.4
Specific Conductance (μmho cm^{-1})	71	78
Total Kjeldahl Nitrogen (mg N l^{-1})	0.54	0.46
NH_3-N (mg N l^{-1})	<0.02	<0.02
$NO_2^- + NO_3^-$ - N (mg N l^{-1})	0.281	0.312
Dissolved Ortho-phosphate (mg P l^{-1})	0.004	0.017
Total Phosphorus (mg P l^{-1})	0.051	0.038

TABLE G-1e

ALGAL GROWTH POTENTIAL

Cycle 2 Station 11 Date Collected 4/3/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	5.60	5.58	5.70	5.63 ± 0.13	5.71	5.85	5.30	5.62 ± 0.57	5.62 ± 0.37
LW+P	11.2	11.2	11.3	11.2 ± 0.12	10.4	9.94	10.2	10.2 ± 0.46	10.7 ± 1.19
LW+N	5.81	5.52	5.54	5.62 ± 0.32	5.64	5.30	4.97	5.30 ± 0.67	5.96 ± 0.59
LW+P+N	27.8	27.6	28.0	27.8 ± 0.40	27.2	24.4	26.5	26.0 ± 2.91	26.9 ± 2.68
LW+E	5.75	5.11	5.32	5.39 ± 0.65	5.26	5.30	5.71	5.42 ± 0.50	5.41 ± 0.52
LW+P+E	11.5	11.3	11.6	11.5 ± 0.31	10.9	10.5	10.8	10.7 ± 0.42	11.1 ± 0.87
LW+N+E	5.41	5.74	5.52	5.56 ± 0.34	5.01	4.83	5.05	4.96 ± 0.23	5.26 ± 0.70
LW+P+N+E	29.7	27.9	27.4	28.3 ± 2.42	29.7	28.9	27.6	28.7 ± 2.12	28.5 ± 2.08

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.1	7.1
Specific Conductance (μmho cm^{-1})	89	95
Total Kjeldahl Nitrogen (mg N l^{-1})	0.66	0.60
NH_3-N (mg N l^{-1})	<0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.247	0.274
Dissolved Ortho-phosphate (mg P l^{-1})	<0.002	0.013
Total Phosphorus (mg P l^{-1})	0.049	0.036

TABLE G-1f

ALGAL GROWTH POTENTIAL

Cycle 2 Station 13 Date Collected 4/2/79 Date Processed 4/4/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	11.4	11.1	10.9	11.1 ± 0.50	11.0	12.1	12.1	11.7 ± 1.27	11.4 ± 1.09
LW+P	14.8	15.5	12.9	24.4 ± 2.69	15.1	15.5	15.5	15.4 ± 0.46	14.9 ± 2.03
LW+N	11.4	11.8	11.4	11.5 ± 0.46	10.7	11.7	11.6	11.3 ± 1.10	11.4 ± 0.79
LW+P+N	30.0	31.6	30.4	30.7 ± 1.67	30.7	34.1	33.0	32.6 ± 3.47	31.6 ± 3.23
LW+E	12.0	11.5	11.0	11.5 ± 1.00	12.8	11.2	11.7	11.9 ± 1.64	11.7 ± 1.29
LW+P+E	15.2	15.3	15.2	15.2 ± 0.12	16.2	15.9	16.5	16.2 ± 0.60	15.7 ± 1.13
LW+N+E	11.4	11.6	11.6	11.5 ± 0.23	12.3	11.4	12.0	11.9 ± 0.92	11.7 ± 0.72
LW+P+N+E	31.6	32.6	33.8	32.7 ± 2.20	33.0	32.1	35.9	33.7 ± 3.97	33.2 ± 3.07

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	8.1	8.0
Specific Conductance (μmho cm^{-1})	106	113
Total Kjeldahl Nitrogen (mg N l^{-1})	0.52	0.58
NH_3-N (mg N l^{-1})	<0.02	<0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.440	0.410
Dissolved Ortho-phosphate (mg P l^{-1})	0.019	0.026
Total Phosphorus (mg P l^{-1})	0.050	0.046

TABLE G-1g

ALGAL GROWTH POTENTIAL

Cycle 2 Station 14 Date Collected 4/2/79 Date Processed 4/4/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	1.03	2.30	1.26	1.53 ± 1.35	2.26	1.80	1.78	1.95 ± 0.54	1.74 ± 1.03
LW+P	15.3	15.0	15.5	15.3 ± 0.50	15.0	15.9	15.8	15.6 ± 0.99	15.4 ± 0.77
LW+N	.978	1.20	1.63	1.27 ± 0.66	2.03	1.97	1.79	1.93 ± 0.25	1.60 ± 0.85
LW+P+N	24.8	23.5	22.5	23.6 ± 2.31	23.6	22.4	20.5	22.2 ± 3.13	22.9 ± 2.92
LW+E	1.06	1.22	1.16	1.15 ± 0.16	.920	1.36	1.78	1.35 ± 0.86	1.25 ± 0.60
LW+P+E	15.9	14.9	15.3	15.4 ± 1.01	13.6	12.9	15.5	14.00 ± 2.69	14.7 ± 2.35
LW+N+E	2.32	1.32	1.09	1.58 ± 1.31	1.63	1.42	1.63	1.56 ± 0.24	1.57 ± 0.84
LW+P+N+E	20.5	21.3	21.4	21.1 ± 0.99	19.8	23.4	19.9	21.0 ± 4.10	21.1 ± 2.67

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH		7.6
Specific Conductance (μmho cm^{-1})	201	203
Total Kjeldahl Nitrogen (mg N l^{-1})	0.56	0.48
NH_3-N (mg N l^{-1})	0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.378	0.379
Dissolved Ortho-phosphate (mg P l^{-1})	0.003	0.005
Total Phosphorus (mg P l^{-1})	0.018	0.011

TABLE G-1h

ALGAL GROWTH POTENTIAL

Cycle 2 Station 15 Date Collected 4/2/79 Date Processed 4/4/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	9.96	9.18	9.75	9.63 ± 0.81	10.4	9.98	10.4	10.3 ± 0.48	9.95 ± 0.91
LW+P	19.2	20.7	20.8	20.2 ± 1.79	21.1	20.8	22.5	21.5 ± 1.81	20.9 ± 2.10
LW+N	10.4	10.4	10.5	10.4 ± 0.12	10.3	10.8	10.7	10.6 ± 0.53	10.5 ± 0.39
LW+P+N	33.4	33.6	33.6	33.6 ± 0.23	30.5	29.5	28.7	29.6 ± 1.80	31.6 ± 4.49
LW+E	10.7	10.6	10.5	10.6 ± 0.20	10.5	11.0	10.8	10.8 ± 0.50	10.7 ± 0.39
LW+P+E	21.3	22.0	22.6	22.0 ± 1.30	20.6	21.2	21.4	21.1 ± 0.83	21.5 ± 1.39
LW+N+E	10.6	10.5	10.6	10.6 ± 0.12	11.9	12.3	10.3	11.5 ± 2.12	11.0 ± 1.69
LW+P+N+E	31.1	34.0	30.8	32.0 ± 3.53	32.3	31.8	33.2	32.4 ± 1.42	32.2 ± 2.46

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.8	7.9
Specific Conductance (μmho cm^{-1})	105	112
Total Kjeldahl Nitrogen (mg N l^{-1})	0.39	0.45
NH_3-N (mg N l^{-1})	<0.02	0.06
NO_2^- + NO_3^- - N (mg N l^{-1})	0.447	0.486
Dissolved Ortho-phosphate (mg P l^{-1})	0.008	0.024
Total Phosphorus (mg P l^{-1})	0.043	0.042

TABLE G-11

ALGAL GROWTH POTENTIAL

Cycle 2 Station 16 Date Collected 4/2/79 Date Processed 4/4/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	14 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	Overall $\bar{x} \pm 2\sigma$
LW	9.82	10.1	10.0	9.97 ± 0.28	10.6	11.1	10.8	10.8 ± 0.50	10.4 ± 1.01
LW+P	19.8	18.4	19.0	19.1 ± 1.40	21.2	21.7	21.6	21.5 ± 0.53	20.3 ± 2.83
LW+N	10.1	10.7	9.74	10.2 ± 0.97	10.0	10.8	10.5	10.4 ± 0.81	10.3 ± 0.85
LW+P+N	27.4	27.3	28.8	27.8 ± 1.68	31.0	30.4	30.5	30.6 ± 0.64	29.2 ± 3.27
LW+E	10.2	10.4	11.0	10.5 ± 0.83	10.0	10.5	10.2	10.2 ± 0.50	10.4 ± 0.70
LW+P+E	19.6	21.1	21.3	20.7 ± 1.86	19.0	20.5	21.6	20.4 ± 2.61	20.5 ± 2.05
LW+N+E	10.4	10.1	9.58	10.0 ± 0.83	10.7	10.4	11.0	10.7 ± 0.60	10.4 ± 0.98
LW+P+N+E	28.6	29.8	30.6	29.7 ± 2.01	29.9	32.1	31.4	31.1 ± 2.25	30.4 ± 2.78

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.4	7.3
Specific Conductance (μmho cm^{-1})	117	120
Total Kjeldahl Nitrogen (mg N l^{-1})	0.61	0.62
NH_3-N (mg N l^{-1})	0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.658	0.542
Dissolved Ortho-phosphate (mg P l^{-1})	0.024	0.024
Total Phosphorus (mg P l^{-1})	0.040	0.032

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

TABLE G-1j

ALGAL GROWTH POTENTIAL

Cycle 2 Station 18 Date Collected 4/3/79 Date Processed 4/5/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	7.49	8.13	9.90	8.51 ± 2.50	8.44	8.34	8.49	8.42 ± 0.15	8.47 ± 1.58
LW+P	12.6	12.2	12.6	12.5 ± 0.46	13.6	11.6	13.1	12.8 ± 2.08	12.6 ± 1.39
LW+N	9.04	7.86	7.96	8.29 ± 1.31	8.86	8.83	8.72	8.80 ± 0.15	8.55 ± 1.01
LW+P+N	28.4	27.8	29.7	28.6 ± 1.94	29.9	26.9	27.3	28.0 ± 3.26	28.3 ± 2.49
LW+E	8.06	8.29	8.66	8.34 ± 0.61	7.71	8.31	8.67	8.23 ± 0.97	8.28 ± 0.73
LW+P+E	13.3	11.8	13.1	12.7 ± 1.63	13.0	12.8	11.8	12.5 ± 1.29	12.6 ± 1.33
LW+N+E	7.75	7.71	8.44	7.97 ± 0.82	8.10	8.18	8.46	8.25 ± 0.38	8.11 ± 0.65
LW+P+N+E	30.8	29.9	27.9	29.5 ± 2.97	31.5	29.5	28.1	29.7 ± 3.42	29.6 ± 2.87

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.8	7.3
Specific Conductance (μmho cm^{-1})	101	115
Total Kjeldahl Nitrogen (mg N l^{-1})	0.58	0.62
NH_3-N (mg N l^{-1})	<0.02	0.02
NO_2^- + NO_3^- - N (mg N l^{-1})	0.280	0.329
Dissolved Ortho-phosphate (mg P l^{-1})	0.008	0.019
Total Phosphorus (mg P l^{-1})	0.047	0.041

TABLE G-2a

ALGAL GROWTH POTENTIAL

Cycle 4 Station 6 Date Collected 7/18/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	14 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	Overall $\bar{x} \pm 2\sigma$
LW	8.99	7.87	9.38	8.75 ±1.57	8.27	8.93	9.34	8.85 ± 1.08	8.81 ± 1.18
LW+P	14.0	13.0	14.2	13.7 ±1.29	11.7	13.1	12.4	12.4 ± 1.40	13.1 ± 1.89
LW+N	9.78	8.73	10.0	9.50 ±1.36	9.63	10.5	8.67	9.60 ± 1.83	9.55 ± 1.45
LW+P+N	27.4	30.7	31.1	29.7 ±4.06	26.6	31.8	30.0	29.5 ± 5.28	29.6 ± 4.22
LW+E	8.34	8.99	8.78	8.70 ±0.66	8.16	8.52	8.02	8.23 ± 0.52	8.47 ± 0.74
LW+P+E	8.89	9.31	8.51	8.90 ±0.80	9.31	8.99	8.93	9.08 ± 0.41	8.99 ± 0.60
LW+N+E	9.04	9.26	9.49	9.26 ±0.45	7.74	7.27	7.99	7.67 ± 0.73	8.47 ± 1.83
LW+P+N+E	28.2	27.9	30.7	28.9 ±3.07	29.4	33.4	30.9	31.2 ± 4.04	30.1 ± 4.08

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	6.9	6.9
Specific Conductance (μmho cm^{-1})	77	80
Total Kjeldahl Nitrogen (mg N l^{-1})	0.43	0.47
NH_3-N (mg N l^{-1})	0.05	0.04
NO_2^- + NO_3^- - N (mg N l^{-1})	0.27	0.33
Dissolved Ortho-phosphate (mg P l^{-1})	0.009	0.021
Total Phosphorus (mg P l^{-1})	0.059	0.048

TABLE G-2b

ALGAL GROWTH POTENTIAL

Cycle 4 Station 7 Date Collected 7/18/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	6.65	6.68	6.37	6.57 ± 0.34	6.44	6.74	7.02	6.73 ± 0.58	6.65 ± 0.46
LW+P	14.4	13.6	13.5	13.8 ± 0.99	15.0	14.0	14.5	14.5 ± 1.00	14.2 ± 1.15
LW+N	6.15	6.33	5.52	6.00 ± 0.85	6.94	6.61	6.45	6.67 ± 0.50	6.35 ± 0.89
LW+P+N	29.8	27.1	32.2	29.7 ± 5.10	29.8	35.6	32.2	32.5 ± 5.83	31.1 ± 5.80
LW+E	6.88	6.91	6.72	6.84 ± 0.20	6.87	5.82	6.22	6.30 ± 1.06	6.57 ± 0.90
LW+P+E	15.1	17.1	15.6	15.9 ± 2.08	15.0	13.1	13.4	13.8 ± 2.04	14.9 ± 2.95
LW+N+E	6.83	6.09	6.57	6.50 ± 0.75	5.15	6.77	6.02	5.98 ± 1.62	6.24 ± 1.26
LW+P+N+E	32.1	33.5	30.5	32.0 ± 3.00	38.4	35.9	38.6	37.6 ± 3.00	34.8 ± 6.70

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.1	7.1
Specific Conductance (μmho cm^{-1})	79	82
Total Kjeldahl Nitrogen (mg N l^{-1})	0.52	0.62
NH_3-N (mg N l^{-1})	0.08	0.07
NO_2^- + NO_3^- - N (mg N l^{-1})	0.27	0.32
Dissolved Ortho-phosphate (mg P l^{-1})	0.005	0.015
Total Phosphorus (mg P l^{-1})	0.053	0.056

TABLE G-2c

ALGAL GROWTH POTENTIAL

Cycle 4 Station 9 Date Collected 7/17/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	5.43	5.04	3.98	4.82 ± 1.50	6.11	5.22	5.27	5.53 ± 1.00	5.17 ± 1.39
LW+P	8.71	7.83	10.5	9.01 ± 2.72	11.7	11.2	11.1	11.3 ± 0.64	10.2 ± 3.10
LW+N	5.81	4.37	5.16	5.11 ± 1.44	6.09	6.35	5.06	5.83 ± 1.36	5.47 ± 1.48
LW+P+N	29.5	30.7	27.2	29.1 ± 3.56	29.0	27.3	30.6	29.0 ± 3.30	29.1 ± 3.07
LW+E	5.78	6.44	5.87	6.03 ± 0.72	6.89	6.30	6.60	6.60 ± 0.59	6.31 ± 0.85
LW+P+E	12.6	12.3	10.5	11.8 ± 2.27	8.46	8.93	11.5	9.63 ± 3.27	10.7 ± 3.46
LW+N+E	6.20	3.54	5.89	5.21 ± 2.91	6.15	4.79	5.46	5.47 ± 1.36	5.34 ± 2.05
LW+P+N+E	37.3	30.8	30.3	32.8 ± 7.81	38.1	34.2	35.8	36.0 ± 3.92	34.4 ± 6.56

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.4	7.3
Specific Conductance (μmho cm^{-1})	80	83
Total Kjeldahl Nitrogen (mg N l^{-1})	0.60	0.66
NH_3-N (mg N l^{-1})	0.02	0.04
NO_2^- + NO_3^- - N (mg N l^{-1})	0.15	0.21
Dissolved Ortho-phosphate (mg P l^{-1})	0.013	0.012
Total Phosphorus (mg P l^{-1})	0.040	0.045

TABLE G-2d

ALGAL GROWTH POTENTIAL

Cycle 4 Station 10 Date Collected 7/17/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	4.43	3.57	4.64	4.21 ± 1.13	4.06	4.46	3.76	4.09 ± 0.70	4.15 ± 0.85
LW+P	8.46	8.29	7.99	8.25 ± 0.48	8.80	8.54	8.15	8.50 ± 0.65	8.37 ± 0.58
LW+N	4.13	4.02	4.09	4.08 ± 0.11	4.47	4.07	4.06	4.20 ± 0.48	4.14 ± 0.33
LW+P+N	24.8	27.5	25.3	25.9 ± 2.87	22.9	28.5	27.6	26.3 ± 6.01	26.1 ± 4.25
LW+E	3.22	3.20	4.02	3.48 ± 0.94	4.37	4.80	4.07	4.41 ± 0.73	3.95 ± 1.27
LW+P+E	9.37	8.35	8.91	8.88 ± 1.02	9.38	6.33	8.93	8.21 ± 3.29	8.55 ± 2.30
LW+N+E	3.99	4.70	3.74	4.14 ± 1.00	3.13	4.48	3.33	3.65 ± 1.46	3.09 ± 1.24
LW+P+N+E	26.8	25.1	26.5	26.1 ± 1.81	24.6	33.1	25.9	27.9 ± 9.16	27.0 ± 6.20

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	8.0	8.2
Specific Conductance (μmho cm^{-1})	80	85
Total Kjeldahl Nitrogen (mg N l^{-1})	0.91	0.53
NH_3-N (mg N l^{-1})	0.01	0.06
NO_2^- + NO_3^- - N (mg N l^{-1})	0.11	0.16
Dissolved Ortho-phosphate (mg P l^{-1})	0.006	0.009
Total Phosphorus (mg P l^{-1})	0.042	0.035

TABLE G-2e

ALGAL GROWTH POTENTIAL

Cycle 4 Station 11 Date Collected 7/17/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	3.85	3.89	3.69	3.81 ± 0.21	4.20	3.46	2.97	3.54 ± 1.24	3.68 ± 0.85
LW+P	6.79	5.62	6.72	6.38 ± 0.31	8.83	7.16	6.25	7.41 ± 2.62	6.90 ± 2.17
LW+N	3.82	3.98	3.50	3.77 ± 0.49	4.23	3.31	4.07	3.87 ± 0.98	3.82 ± 0.70
LW+P+N	26.7	28.8	32.6	29.4 ± 5.98	25.2	26.3	29.0	26.8 ± 3.91	28.1 ± 5.30
LW+E	3.52	3.43	3.18	3.38 ± 0.35	3.46	2.51	3.22	3.06 ± 0.99	3.22 ± 0.75
LW+P+E	5.01	6.75	6.47	6.08 ± 1.87	7.21	9.05	9.36	8.54 ± 2.32	7.31 ± 3.29
LW+N+E	4.07	3.92	3.80	3.93 ± 0.27	3.59	4.14	2.08	3.27 ± 2.13	3.60 ± 1.54
LW+P+N+E	27.1	21.8	28.2	25.7 ± 6.84	21.1	17.8	24.3	21.1 ± 6.50	23.4 ± 7.84

Background Water Quality

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Parameter and Units	Before Processing	After Processing
pH	7.8	7.8
Specific Conductance (μmho cm^{-1})	92	96
Total Kjeldahl Nitrogen (mg N 1^{-1})	0.58	0.54
NH_3-N (mg N 1^{-1})	0.01	0.04
NO_2^- + NO_3^- - N (mg N 1^{-1})	0.18	0.33
Dissolved Ortho-phosphate (mg P 1^{-1})	0.009	0.009
Total Phosphorus (mg P 1^{-1})	0.035	0.030

TABLE G-2f

ALGAL GROWTH POTENTIAL

Cycle 4 Station 12 Date Collected 7/18/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	1.56	1.74	--	1.65 ± 0.25	1.60	1.64	--	1.62 ± 0.06	1.64 ± 0.15
LW+P	1.29	1.81	1.74	1.61 ± 0.56	1.21	1.37	1.38	1.32 ± 0.19	1.47 ± 0.50
LW+N	2.51	1.60	1.30	1.80 ± 1.26	1.58	1.41	1.06	1.35 ± 0.53	1.58 ± 1.00
LW+P+N	26.4	23.1	24.4	24.6 ± 3.32	28.3	--	--	28.3 ± 0.00	25.6 ± 4.56
LW+E	1.82	1.33	1.57	1.57 ± 0.49	1.08	1.65	1.32	1.35 ± 0.57	1.46 ± 0.54
LW+P+E	1.90	1.43	1.56	1.63 ± 0.49	2.03	--	1.10	1.57 ± 1.32	1.60 ± 0.75
LW+N+E	1.81	1.70	1.63	1.71 ± 0.18	1.74	1.50	1.21	1.48 ± 0.53	1.60 ± 0.44
LW+P+N+E	23.7	26.2	24.9	24.9 ± 2.50	21.2	22.5	23.3	22.3 ± 2.12	23.6 ± 3.52

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.4	7.4
Specific Conductance (μmho cm^{-1})	84	86
Total Kjeldahl Nitrogen (mg N l^{-1})	0.39	0.38
NH_3-N (mg N l^{-1})	0.06	0.03
NO_2^- + NO_3^- - N (mg N l^{-1})	0.014	0.017
Dissolved Ortho-phosphate (mg P l^{-1})	0.005	0.004
Total Phosphorus (mg P l^{-1})	0.021	0.023

TABLE G-2g

ALGAL GROWTH POTENTIAL

Cycle 4 Station 13 Date Collected 7/16/79 Date Processed 7/18/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	3.02	2.56	2.52	2.70 ± 0.56	2.56	1.52	1.81	1.97 ± 1.10	2.34 ± 1.11
LW+P	8.43	9.58	6.89	8.30 ± 2.70	11.1	8.38	6.37	8.62 ± 4.75	8.46 ± 3.47
LW+N	2.73	2.73	1.63	2.36 ± 1.27	2.66	2.54	2.61	2.60 ± 0.12	2.48 ± 0.85
LW+P+N	17.4	23.3	19.4	20.0 ± 6.00	12.7	13.5	10.3	12.2 ± 3.33	16.1 ± 9.64
LW+E	1.86	2.92	2.05	2.28 ± 1.13	2.86	2.78	2.77	2.80 ± 0.10	2.54 ± 0.92
LW+P+E	9.98	11.6	10.6	10.7 ± 1.63	8.67	10.1	6.99	8.59 ± 3.11	9.66 ± 3.23
LW+N+E	2.96	2.97	2.50	2.81 ± 0.54	2.19	3.11	2.40	2.57 ± 0.96	2.69 ± 0.75
LW+P+N+E	24.3	26.3	24.5	25.0 ± 2.20	23.1	--	26.1	24.6 ± 4.24	24.9 ± 2.67

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	8.4	8.3
Specific Conductance (μmho cm^{-1})	140	146
Total Kjeldahl Nitrogen (mg N l^{-1})	0.40	0.39
NH_3-N (mg N l^{-1})	0.05	0.03
NO_2^- + NO_3^- - N (mg N l^{-1})	0.22	0.22
Dissolved Ortho-phosphate (mg P l^{-1})	0.005	0.006
Total Phosphorus (mg P l^{-1})	0.039	0.031

TABLE G-2h

ALGAL GROWTH POTENTIAL

Cycle 4 Station 14 Date Collected 7/16/79 Date Processed 7/18/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	1.71	1.39	1.22	1.44 ± 0.50	1.65	1.72	1.46	1.61 ± 0.27	1.53 ± 0.40
LW+P	14.4	16.0	15.0	15.1 ± 1.61	15.6	19.4	14.3	16.4 ± 5.30	15.8 ± 3.78
LW+N	1.06	1.19	1.33	1.19 ± 0.27	1.39	1.40	1.58	1.46 ± 0.21	1.33 ± 0.36
LW+P+N	22.7	22.9	25.5	23.7 ± 3.12	24.6	25.0	22.2	23.9 ± 3.03	23.8 ± 2.76
LW+E	1.23	1.29	1.26	1.26 ± 0.06	1.16	1.28	1.41	1.28 ± 0.25	1.27 ± 0.16
LW+P+E	19.9	16.5	16.1	17.5 ± 4.18	16.4	17.3	17.8	17.2 ± 1.42	17.4 ± 2.83
LW+N+E	1.34	1.17	1.12	1.21 ± 0.23	1.19	1.33	1.28	1.27 ± 0.14	1.24 ± 0.18
LW+P+N+E	22.6	28.8	26.2	25.9 ± 6.23	27.6	11.9	24.5	21.3 ± 16.6	23.6 ± 12.3

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	8.0	8.0
Specific Conductance (μmho cm^{-1})	185	190
Total Kjeldahl Nitrogen (mg N l^{-1})	0.60	0.34
NH_3-N (mg N l^{-1})	*	0.01
NO_2^- + NO_3^- - N (mg N l^{-1})	0.34	0.40
Dissolved Ortho-phosphate (mg P l^{-1})	0.003	0.003
Total Phosphorus (mg P l^{-1})	0.018	0.021

*Sample Results unreliable.

TABLE G-21

ALGAL GROWTH POTENTIAL

Cycle 4 Station 15 Date Collected 7/16/79 Date Processed 7/18/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	7.62	7.45	8.08	7.72 ± 0.65	7.09	--	--	7.09 ± 0.00	7.56 ± 0.82
LW+P	15.8	15.9	17.3	16.3 ± 1.68	15.1	11.9	13.2	13.4 ± 3.22	14.9 ± 3.95
LW+N	--	7.29	--	7.29 ± 0.00	--	8.73	--	8.73 ± 0.00	8.01 ± 2.04
LW+P+N	29.8	27.7	29.6	29.0 ± 2.32	31.6	33.0	35.0	33.2 ± 3.42	31.1 ± 5.26
LW+E	7.62	6.86	7.65	7.38 ± 0.90	8.39	6.76	7.42	7.52 ± 1.64	7.45 ± 1.19
LW+P+E	15.7	16.3	15.5	15.8 ± 0.83	14.4	14.6	19.3	16.1 ± 5.55	16.0 ± 3.56
LW+N+E	7.38	7.29	7.83	7.50 ± 0.58	8.33	--	9.31	8.82 ± 1.39	8.03 ± 1.65
LW+P+N+E	31.6	30.8	31.6	31.3 ± 0.92	27.7	--	--	27.7 ± 0.00	30.4 ± 3.71

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	8.0	8.4
Specific Conductance (μmho cm^{-1})	133	138
Total Kjeldahl Nitrogen (mg N l^{-1})	0.48	0.43
NH_3-N (mg N l^{-1})	*	0.05
NO_2^- + NO_3^- - N (mg N l^{-1})	0.33	0.36
Dissolved Ortho-phosphate (mg P l^{-1})	0.017	0.017
Total Phosphorus (mg P l^{-1})	0.067	0.029

*Sample Results unreliable.

TABLE G-2j

ALGAL GROWTH POTENTIAL

Cycle 4 Station 16 Date Collected 7/16/79 Date Processed 7/18/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	14.9	14.3	14.6	14.6 ± 0.60	9.45	7.76	5.61	7.61 ± 3.85	11.1 ± 8.05
LW+P	24.5	23.9	26.5	25.0 ± 2.72	--	--	--	-- ± --	25.0 ± 2.72
LW+N	13.5	14.0	13.7	13.7 ± 0.50	9.73	8.34	--	9.04 ± 1.97	11.9 ± 5.25
LW+P+N	32.4	36.9	37.1	35.5 ± 5.32	--	--	--	-- ± --	35.5 ± 5.32
LW+E	13.8	13.2	12.3	13.1 ± 1.51	2.86	5.44	3.68	3.99 ± 2.64	8.55 ± 10.2
LW+P+E	22.4	21.5	24.6	22.8 ± 3.19	11.0	16.6	17.5	15.0 ± 7.04	18.9 ± 9.84
LW+N+E	15.9	15.5	15.7	15.7 ± 0.40	--	--	16.2	16.2 ± 0.00	15.8 ± 0.60
LW+P+N+E	43.0	35.0	34.6	37.5 ± 9.48	14.8	14.8	10.7	13.4 ± 4.73	23.7 ± 28.8

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.7	7.8
Specific Conductance (μmho cm^{-1})	110	115
Total Kjeldahl Nitrogen (mg N l^{-1})	0.33	0.34
NH_3-N (mg N l^{-1})	0.02	0.04
NO_2^- + NO_3^- - N (mg N l^{-1})	0.53	0.55
Dissolved Ortho-phosphate (mg P l^{-1})	0.030	0.032
Total Phosphorus (mg P l^{-1})	0.052	0.061

TABLE G-2k

ALGAL GROWTH POTENTIAL

Cycle 4 Station 18 Date Collected 7/17/79 Date Processed 7/19/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	3.64	4.99	3.82	4.15 ± 1.47	4.89	3.81	4.05	4.25 ± 1.13	4.20 ± 1.18
LW+P	10.6	10.8	10.8	10.7 ± 0.23	10.4	11.1	6.73	9.41 ± 4.69	10.1 ± 3.31
LW+N	4.96	5.30	5.40	5.22 ± 0.46	5.01	5.29	5.30	5.20 ± 0.33	5.21 ± 0.36
LW+P+N	26.3	27.4	29.8	27.8 ± 3.58	28.4	25.5	23.5	25.8 ± 4.93	26.8 ± 4.44
LW+E	6.87	5.81	5.77	6.15 ± 1.25	5.14	5.73	4.51	5.13 ± 1.22	5.64 ± 1.57
LW+P+E	11.7	7.6	11.8	10.4 ± 4.79	6.85	13.8	14.9	11.9 ± 8.73	11.1 ± 6.50
LW+N+E	6.10	5.31	4.73	5.38 ± 1.38	5.25	5.16	4.52	4.98 ± 0.80	5.18 ± 1.10
LW+P+N+E	31.3	30.3	29.8	30.5 ± 1.53	24.7	--	--	24.7 ± 0.00	29.0 ± 5.90

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.4	7.5
Specific Conductance (μmho cm^{-1})	110	115
Total Kjeldahl Nitrogen (mg N l^{-1})	0.51	0.34
NH_3-N (mg N l^{-1})	0.02	0.05
NO_2^- + NO_3^- - N (mg N l^{-1})	0.21	0.24
Dissolved Ortho-phosphate (mg P l^{-1})	0.007	0.013
Total Phosphorus (mg P l^{-1})	0.042	0.049

TABLE G-3a

ALGAL GROWTH POTENTIAL

Cycle 6 Station 6 Date Collected 9/26/79 Date Processed 9/27/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.91	0.63	0.18	0.57 ± 0.74	1.01	0.94	0.10	0.68 ± 1.01	0.63 ± 0.80
LW+P	0.23	0.35	0.36	0.32 ± 0.14	0.26	0.56	0.37	0.40 ± 0.31	0.36 ± 0.23
LW+N	0.45	1.09	0.27	0.61 ± 0.86	0.24	0.33	0.27	0.28 ± 0.09	0.44 ± 0.65
LW+P+N	0.10	0.27	8.54	2.97 ± 9.66	0.17	0.27	8.62	3.02 ± 9.70	2.99 ± 8.65
LW+E	1.18	0.24	0.20	0.54 ± 1.11	3.52	0.19	0.21	1.31 ± 3.83	0.92 ± 2.66
LW+P+E	5.78	0.24	8.15	4.72 ± 8.12	6.36	0.48	8.03	4.96 ± 7.94	4.84 ± 7.19
LW+N+E	0.49	0.14	0.67	0.43 ± 0.54	0.27	0.11	0.64	0.34 ± 0.54	0.39 ± 0.50
LW+P+N+E	27.2	21.0	0.79	16.3 ±27.6	21.2	17.5	5.68	14.8 ±16.2	15.6 ± 20.3

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	6.98	
Specific Conductance (μmho cm^{-1})	78.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.306	0.683*
NH_3-N (mg N l^{-1})	0.045	0.021
NO_2^- + NO_3^- - N (mg N l^{-1})	0.235	0.202
Dissolved Ortho-phosphate (mg P l^{-1})	0.008	0.018
Total Phosphorus (mg P l^{-1})	0.033	0.042

*Confirmed

TABLE G-3b

ALGAL GROWTH POTENTIAL

Cycle 6 Station 7 Date Collected 9/25/79 Date Processed 9/26/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.26	0.26	0.31	0.28 ± 0.06	0.18	0.19	0.11	0.16 ± 0.09	0.22 ± 0.14
LW+P	2.13	1.25	3.53	2.30 ± 2.29	2.91	2.27	4.09	3.09 ± 1.84	2.70 ± 2.05
LW+N	0.26	0.23	0.18	0.22 ± 0.08	0.18	0.32	0.16	0.22 ± 0.17	0.22 ± 0.12
LW+P+N	0.18	0.12	0.24	0.18 ± 0.13	0.41	0.37	0.42	0.40 ± 0.05	0.29 ± 0.26
LW+E	0.33	0.26	0.34	0.31 ± 0.08	0.30	0.23	0.34	0.29 ± 0.11	0.30 ± 0.09
LW+P+E	0.26	0.13	3.30	1.23 ± 3.59	0.12	0.15	3.95	1.41 ± 4.40	1.32 ± 3.60
LW+N+E	0.23	0.24	0.25	0.24 ± 0.02	0.30	0.16	0.38	0.28 ± 0.22	0.26 ± 0.15
LW+P+N+E	0.73	0.76	0.22	0.57 ± 0.61	5.67	10.9	0.38	5.65 ±10.5	3.11 ± 8.70

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.00	
Specific Conductance (μmho cm^{-1})	95.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.536	0.788*
NH_3-N (mg N l^{-1})	0.069	0.057
NO_2^- + NO_3^- - N (mg N l^{-1})	0.160	0.173
Dissolved Ortho-phosphate (mg P l^{-1})	0.003	0.013
Total Phosphorus (mg P l^{-1})	0.029	0.028

*Confirmed

TABLE G-3c

ALGAL GROWTH POTENTIAL

Cycle 6 Station 9 Date Collected 9/25/79 Date Processed 9/26/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.21	0.44	0.35	0.33 ± 0.23	0.55	0.33	0.40	0.43 ± 0.23	0.38 ± 0.23
LW+P	3.37	3.28	2.20	2.95 ± 1.30	4.70	3.16	2.27	3.37 ± 2.45	3.16 ± 1.82
LW+N	0.45	0.38	0.38	0.40 ± 0.08	0.36	0.45	0.45	0.42 ± 0.10	0.41 ± 0.08
LW+P+N	0.49	11.3	8.63	6.80 ± 11.2	0.53	11.6	9.35	7.16 ± 11.7	6.98 ± 10.3
LW+E	0.39	0.47	0.43	0.43 ± 0.08	0.63	0.44	0.43	0.50 ± 0.22	0.46 ± 0.17
LW+P+E	5.44	4.70	0.35	3.50 ± 5.50	6.05	5.13	0.48	3.89 ± 5.97	3.69 ± 5.15
LW+N+E	0.35	0.40	---	0.37 ± 0.07	0.38	0.49	---	0.44 ± 0.15	0.40 ± 0.12
LW+P+N+E	0.40	6.82	---	3.61 ± 9.07	0.34	8.09	---	4.21 ± 11.0	3.91 ± 8.24

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	6.90	
Specific Conductance (μmho cm^{-1})	88.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.420	0.546*
NH_3-N (mg N l^{-1})	0.108	0.120
NO_2^- + NO_3^- - N (mg N l^{-1})	0.093	0.092
Dissolved Ortho-phosphate (mg P l^{-1})	0.005	0.019
Total Phosphorus (mg P l^{-1})	0.029	0.040

*Confirmed

TABLE G-3d

ALGAL GROWTH POTENTIAL

Cycle 6 Station 10 Date Collected 9/25/79 Date Processed 9/26/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.15	0.10	0.21	0.15 ± 0.11	0.16	0.12	0.39	0.22 ± 0.29	0.19 ± 0.21
LW+P	1.87	0.72	0.57	1.06 ± 1.42	3.49	0.79	0.68	1.71 ± 3.09	1.38 ± 2.27
LW+N	0.08	0.14	---	0.11 ± 0.09	0.16	0.15	---	0.15 ± 0.02	0.13 ± 0.08
LW+P+N	2.88	1.14	2.07	2.03 ± 1.74	10.5	1.77	4.68	5.63 ± 8.84	3.83 ± 6.93
LW+E	---	---	---	±	---	---	---	±	±
LW+P+E	---	---	---	±	---	---	---	±	±
LW+N+E	---	---	---	±	---	---	---	±	±
LW+P+N+E	---	---	---	±	---	---	---	±	±

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.00	
Specific Conductance (μmho cm^{-1})	85.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.364	0.578*
NH_3-N (mg N l^{-1})	0.095	0.093
$NO_2^- + NO_3^-$ - N (mg N l^{-1})	0.085	0.085
Dissolved Ortho-phosphate (mg P l^{-1})	0.006	0.018
Total Phosphorus (mg P l^{-1})	0.044	0.041

*Confirmed

TABLE G-3e

ALGAL GROWTH POTENTIAL

Cycle 6 Station 11 Date Collected 9/25/79 Date Processed 9/26/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count Replicate 1	12 Day Count Replicate 2	12 Day Count Replicate 3	12 Day $\bar{x} \pm 2\sigma$	14 Day Count Replicate 1	14 Day Count Replicate 2	14 Day Count Replicate 3	14 Day $\bar{x} \pm 2\sigma$	Overall $\bar{x} \pm 2\sigma$
LW	0.08	0.27	0.25	0.20 ± 0.21	0.11	0.21	0.23	0.18 ± 0.13	0.19 ± 0.15
LW+P	0.38	0.22	0.19	0.26 ± 0.21	0.27	0.21	0.21	0.23 ± 0.06	0.25 ± 0.14
LW+N	0.25	0.16	0.21	0.21 ± 0.09	0.12	0.14	0.15	0.14 ± 0.03	0.17 ± 0.10
LW+P+N	0.28	0.84	0.71	0.61 ± 0.58	0.51	0.63	0.66	0.60 ± 0.16	0.60 ± 0.38
LW+E	0.19	0.24	---	0.21 ± 0.07	0.76	0.17	---	0.40 ± 0.83	0.34 ± 0.56
LW+P+E	---	---	---	±	---	---	---	±	±
LW+N+E	---	---	---	±	---	---	---	±	±
LW+P+N+E	0.42	0.49	0.98	0.63 ± 0.61	0.44	0.24	0.96	0.55 ± 0.74	0.59 ± 0.61

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.10	
Specific Conductance (μmho cm^{-1})	93.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.260	0.300*
NH_3-N (mg N l^{-1})	0.045	0.135
$NO_2^- + NO_3^-$ - N (mg N l^{-1})	0.130	0.081
Dissolved Ortho-phosphate (mg P l^{-1})	0.006	0.014
Total Phosphorus (mg P l^{-1})	0.059	0.034*

*Confirmed

TABLE G-3f

ALGAL GROWTH POTENTIAL

Cycle 6 Station 12 Date Collected 9/24/79 Date Processed 9/25/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate 1	Replicate 2	Replicate 3	$\bar{x} \pm 2\sigma$	Replicate 1	Replicate 2	Replicate 3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.05	0.14	0.10	0.10 ± 0.08	0.20	0.18	0.16	0.18 ± 0.04	0.14 ± 0.11
LW+P	0.31	2.02	0.16	0.83 ± 2.07	0.85	2.19	0.27	1.10 ± 1.97	0.97 ± 1.83
LW+N	0.14	0.05	1.03	0.41 ± 1.07	0.38	0.10	0.19	0.22 ± 0.29	0.31 ± 0.73
LW+P+N	5.91	0.30	7.45	4.55 ± 7.52	4.92	0.21	8.87	4.67 ± 8.68	4.61 ± 7.27
LW+E	0.15	0.26	0.07	0.16 ± 0.19	0.11	0.03	0.11	0.09 ± 0.09	0.12 ± 0.16
LW+P+E	0.62	0.16	0.29	0.36 ± 0.48	0.71	0.47	0.14	0.44 ± 0.57	0.40 ± 0.48
LW+N+E	0.11	0.22	0.22	0.18 ± 0.12	0.11	0.27	0.16	0.18 ± 0.16	0.18 ± 0.13
LW+P+N+E	0.38	0.40	0.16	0.31 ± 0.26	1.46	0.32	0.06	0.62 ± 1.49	0.46 ± 1.01

Background Water Quality

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Parameter and Units	Before Processing	After Processing
pH	7.35	
Specific Conductance (μmho cm^{-1})	95.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.350	0.375*
NH_3-N (mg N l^{-1})	<0.02	0.062
NO_2^- + NO_3^- - N (mg N l^{-1})	0.005	0.011
Dissolved Ortho-phosphate (mg P l^{-1})	<0.002	0.005
Total Phosphorus (mg P l^{-1})	0.009	0.018

*Confirmed

TABLE G-3g

ALGAL GROWTH POTENTIAL

Cycle 6 Station 13 Date Collected 9/24/79 Date Processed 9/25/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.27	0.14	0.32	0.24 ± 0.18	0.32	0.20	0.33	0.28 ± 0.15	0.26 ± 0.15
LW+P	5.14	3.95	0.29	3.12 ± 5.05	6.19	5.91	0.27	4.13 ± 6.68	3.62 ± 5.41
LW+N	0.17	0.17	0.18	0.17 ± 0.02	0.40	0.21	0.20	0.29 ± 0.20	0.23 ± 0.18
LW+P+N	1.39	0.19	0.19	0.59 ± 1.38	3.76	0.22	0.21	1.40 ± 4.09	0.99 ± 2.87
LW+E	1.65	0.14	0.25	0.68 ± 1.68	9.17	0.27	0.16	3.20 ±10.3	1.94 ± 7.17
LW+P+E	0.40	0.22	0.16	0.26 ± 0.26	0.65	0.15	0.31	0.37 ± 0.52	0.31 ± 0.38
LW+N+E	0.14	0.26	1.51	0.64 ± 1.52	0.14	0.74	10.9	3.94 ±12.1	2.29 ± 8.54
LW+P+N+E	19.2	0.18	0.16	6.50 ±21.9	32.3	4.58	0.35	12.4 ±34.7	9.46 ± 26.8

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.60	
Specific Conductance (μmho cm^{-1})	150.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.280	0.324*
NH_3-N (mg N l^{-1})	0.060	0.084
NO_2^- + NO_3^- - N (mg N l^{-1})	0.445	0.434
Dissolved Ortho-phosphate (mg P l^{-1})	0.016	0.024
Total Phosphorus (mg P l^{-1})	0.053	0.041

*Confirmed

TABLE G-3h

ALGAL GROWTH POTENTIAL

Cycle 6 Station 14 Date Collected 9/24/79 Date Processed 9/25/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.20	0.38	0.96	0.51 ± 0.79	0.26	0.07	0.84	0.39 ± 0.80	0.45 ± 0.72
LW+P	4.98	0.44	0.44	1.95 ± 5.24	7.93	0.38	0.26	2.86 ± 8.79	2.41 ± 6.55
LW+N	0.43	0.41	0.24	0.36 ± 0.21	0.45	0.46	0.49	0.46 ± 0.04	0.41 ± 0.17
LW+P+N	0.90	3.31	0.47	1.56 ± 3.06	4.20	4.06	0.51	2.92 ± 4.18	2.24 ± 3.60
LW+E	0.38	0.29	0.18	0.28 ± 0.20	0.40	0.54	0.24	0.39 ± 0.29	0.34 ± 0.26
LW+P+E	18.9	11.4	0.43	10.2 ± 18.6	9.31	12.6	0.64	7.51 ± 12.3	8.88 ± 14.4
LW+N+E	0.22	0.40	0.16	0.26 ± 0.24	0.35	0.26	0.20	0.27 ± 0.15	0.27 ± 0.18
LW+P+N+E	9.16	0.52	3.65	4.45 ± 8.75	18.5	0.62	7.08	8.75 ± 18.2	6.60 ± 13.6

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.65	
Specific Conductance (μmho cm^{-1})	208.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.138	0.201*
NH_3-N (mg N l^{-1})	0.018	0.069
NO_2^- + NO_3^- - N (mg N l^{-1})	0.475	0.427
Dissolved Ortho-phosphate (mg P l^{-1})	0.002	0.005
Total Phosphorus (mg P l^{-1})	0.023	0.017

*Confirmed

TABLE G-3i

ALGAL GROWTH POTENTIAL

Cycle 6 Station 15 Date Collected 9/24/79 Date Processed 9/25/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	14 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	Overall $\bar{x} \pm 2\sigma$
LW	0.25	0.43	0.33	0.34 ± 0.17	0.38	0.43	0.49	0.44 ± 0.11	0.39 ± 0.17
LW+P	0.26	0.12	0.32	0.24 ± 0.20	0.24	0.30	0.32	0.29 ± 0.08	0.26 ± 0.15
LW+N	0.23	0.24	0.32	0.26 ± 0.10	0.33	0.22	0.33	0.29 ± 0.12	0.28 ± 0.11
LW+P+N	0.24	0.27	0.29	0.27 ± 0.05	0.22	0.16	0.37	0.25 ± 0.22	0.26 ± 0.14
LW+E	---	---	---	±	---	---	---	±	±
LW+P+E	---	---	---	±	---	---	---	±	±
LW+N+E	---	---	---	±	---	---	---	±	±
LW+P+N+E	---	---	---	±	---	---	---	±	±

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.62	
Specific Conductance (μmho cm^{-1})	153.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.350	0.351
NH_3-N (mg N l^{-1})	0.039	0.072
NO_2^- + NO_3^- - N (mg N l^{-1})	0.575	0.540
Dissolved Ortho-phosphate (mg P l^{-1})	0.024	0.032
Total Phosphorus (mg P l^{-1})	0.058	0.051

TABLE G-3j

ALGAL GROWTH POTENTIAL

Cycle 6 Station 16 Date Collected 9/24/79 Date Processed 9/25/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	14 Day Count Replicate 1	2	3	$\bar{x} \pm 2\sigma$	Overall $\bar{x} \pm 2\sigma$
LW	0.39	0.22	0.50	0.37 ± 0.29	0.56	1.14	0.58	0.76 ± 0.66	0.56 ± 0.62
LW+P	1.07	0.20	0.32	0.53 ± 0.94	2.17	0.24	0.25	0.89 ± 2.22	0.71 ± 1.58
LW+N	1.92	2.39	0.61	1.64 ± 1.85	4.77	2.47	0.34	2.52 ± 4.43	2.08 ± 3.19
LW+P+N	0.35	0.44	5.39	2.06 ± 5.76	0.36	0.25	10.4	3.67 ±11.7	2.87 ± 8.42
LW+E	0.33	0.26	1.03	0.54 ± 0.86	0.49	0.20	0.23	0.31 ± 0.32	0.42 ± 0.63
LW+P+E	11.4	14.4	1.83	9.22 ±13.1	14.4	14.9	5.68	11.6 ±10.3	10.4 ± 10.9
LW+N+E	0.42	0.28	---	0.35 ± 0.19	0.37	0.10	---	0.23 ± 0.39	0.29 ± 0.28
LW+P+N+E	0.34	29.4	---	14.8 ±41.0	0.43	26.9	---	13.7 ±37.5	14.3 ± 32.1

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.59	
Specific Conductance (μmho cm^{-1})	131.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.388	0.356
NH_3-N (mg N l^{-1})	0.102	0.110
NO_2^- + NO_3^- - N (mg N l^{-1})	0.640	0.634
Dissolved Ortho-phosphate (mg P l^{-1})	0.037	0.045
Total Phosphorus (mg P l^{-1})	0.066	0.054

TABLE G-3k

ALGAL GROWTH POTENTIAL

Cycle 6 Station 18 Date Collected 9/25/79 Date Processed 9/26/79

Growth Response, mg/l Ash-Free Dry Wt.

Treatment	12 Day Count				14 Day Count				Overall
	Replicate				Replicate				
	1	2	3	$\bar{x} \pm 2\sigma$	1	2	3	$\bar{x} \pm 2\sigma$	$\bar{x} \pm 2\sigma$
LW	0.18	0.10	0.26	0.18 ± 0.17	0.23	0.18	0.12	0.17 ± 0.11	0.18 ± 0.13
LW+P	0.30	1.04	3.56	1.63 ± 3.41	0.12	2.22	4.14	2.16 ± 4.02	1.90 ± 3.39
LW+N	0.55	0.10	0.11	0.25 ± 0.51	2.25	0.23	0.11	0.86 ± 2.40	0.56 ± 1.69
LW+P+N	0.35	0.18	0.94	0.49 ± 0.80	0.31	0.08	0.50	0.30 ± 0.42	0.39 ± 0.61
LW+E	0.08	0.15	0.25	0.16 ± 0.17	0.06	0.12	0.20	0.13 ± 0.14	0.14 ± 0.14
LW+P+E	0.08	0.43	0.04	0.18 ± 0.43	0.05	0.63	0.15	0.28 ± 0.62	0.23 ± 0.49
LW+N+E	0.06	0.30	0.08	0.15 ± 0.26	0.10	0.08	0.07	0.08 ± 0.03	0.12 ± 0.18
LW+P+N+E	14.6	0.28	0.21	5.02 ± 16.5	24.4	0.17	0.07	8.20 ± 28.0	6.61 ± 20.9

LW = Lake Water
P = 0.05 mg/l P spike
N = 1.00 mg/l N spike
E = 1.00 mg/l EDTA spike

Background Water Quality

Parameter and Units	Before Processing	After Processing
pH	7.25	
Specific Conductance (μmho cm^{-1})	122.	
Total Kjeldahl Nitrogen (mg N l^{-1})	0.384	0.390
NH_3-N (mg N l^{-1})	0.057	0.110
NO_2^- + NO_3^- - N (mg N l^{-1})	0.225	0.219
Dissolved Ortho-phosphate (mg P l^{-1})	0.006	0.020
Total Phosphorus (mg P l^{-1})	0.050	0.080

APPENDIX H

PHYTOPLANKTON DATA

LIST OF TABLES

TABLE H-1a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
ANABAENA SP	-	-	-	-	-	-	-	-	-	-
APHANOCAPSA DELICATISSIMA	-	-	-	-	-	-	-	-	-	-
CHROOCOCCUS DISPERSUS	139	-	-	-	-	-	-	174	-	-
LYNGBYA CONTORTA	52	-	-	-	-	109	-	-	-	-
MERISMOPEDIA TENUISSIMA	-	-	-	-	-	195	-	-	465	-
MICROCYSTIS INCERTA	-	-	-	-	-	-	-	-	-	-
OSCILLATORIA LIMNETICA	453	-	-	377	-	-	-	392	-	-
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	-	-	-	-	-	-
ANKISTRODESMUS FALCATUS	17	51	14	24	40	-	58	65	39	45
ANKISTRODESMUS NANNOSELENE	-	-	-	12	-	-	14	-	-	-
ANKISTRODESMUS SPIRALIS	35	13	58	36	13	36	58	87	77	159
CARTERIA SP	-	-	-	-	-	-	-	-	-	-
CHARACIUM AMBIGUUM	-	-	-	-	13	24	-	-	-	-
CHLAMYDOMONAS SP	-	-	14	12	-	24	-	44	-	91
CHLORELLA SP	70	-	-	-	-	-	-	22	-	-
CHODATELLA CHODATI	-	-	-	-	-	-	-	22	-	-
CHODATELLA SUBSALSA	-	13	-	-	-	-	-	-	-	-
COELASTRUM MICROPORUM	-	-	-	85	-	-	-	-	155	-
COELASTRUM PROBOSCIDEUM	-	-	-	-	-	24	-	-	-	-
CRUCIGENIA QUADRATA	-	-	-	-	-	-	-	87	-	-
CRUCIGENIA TETRAPEDIA	-	-	-	-	-	-	-	-	-	-
DICTYOSPHAERIUM PULCHELLUM	-	-	465	243	228	146	58	152	562	-
ELAKATOTHRIX GELATINOSA	-	-	-	-	-	-	-	-	39	-
EUASTRUM SP	-	-	-	-	-	-	-	-	-	-
GOLENKINIA RADIATA	-	-	-	24	27	-	14	22	-	23
KIRCHNERIELLA LUNARIS	-	-	-	-	13	49	-	87	-	-
KIRCHNERIELLA OBESA	-	-	-	-	-	-	-	-	-	23
OOCYSTIS SP	-	-	-	49	-	-	-	-	-	-

TABLE H-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS ABUNDANS	-	-	-	-	-	-	-	-	39	-
SCENEDESMUS ACUMINATUS	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS ARMATUS	-	51	-	-	-	-	58	-	-	-
SCENEDESMUS ARMATUS V BICAUDATA	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS BIJUGA	-	-	-	97	-	-	29	-	-	-
SCENEDESMUS QUADRICAUDA	70	-	29	-	80	24	116	-	39	-
SCENEDESMUS SP	-	-	-	-	-	-	-	-	-	45
SCHROEDERIA SETIGERA	-	38	-	12	-	-	-	-	-	-
SELANASTRUM MINUTUM	-	-	-	-	-	-	-	-	39	-
SPONDYLOSIUM PLANUM	-	-	-	-	-	-	-	-	-	23
TETRAEDRON CAUDATUM	-	-	-	-	-	-	-	-	-	-
TETRAEDRON REGULARE	-	-	-	-	-	-	-	-	-	-
TETRASTRUM STAUROGENIFORME	-	-	-	-	-	49	-	-	77	-
TREUBARIA SETIGERUM	-	-	-	-	-	-	-	22	-	-
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	-	-	-	-	-	-	-	-
CRYPTOMONAS SP	-	-	-	-	-	-	-	-	-	-
PYRRHOPHYTA										
GLENODONIUM SP	-	-	-	-	-	-	-	-	-	-
PERIDINIUM SP	-	-	-	-	-	-	-	-	-	23
XANTHOPHYCEAE										
OPHIOCYTIUM CAPITATUM V LONGISPINUM	-	-	-	-	-	-	-	-	-	-

TABLE H-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CHRYSOPHYCEAE										
DINOBRYON BAVARICUM	-	-	-	-	-	-	-	-	-	-
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	-	-	364
UNID CHRYSOPHYCEAE	-	13	-	-	-	-	-	-	-	-
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	-	13	-	12	-	12	-	-	-	23
ACHNANTHES SP	-	13	-	-	-	-	-	-	-	-
AMPHORA PERPUSILLA	-	-	-	-	-	-	-	-	-	-
ASTERIONELLA FORMOSA	383	51	247	109	322	36	145	131	155	114
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
COSCINODISCUS SP	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA CATENATA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA SP	-	38	-	134	-	-	29	109	562	387
CYCLOTELLA COMTA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	-	-	-	158	-	-	-	-	97	45
CYCLOTELLA MENEGHINIANA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA STELLIGERA	610	281	203	231	335	632	145	327	194	227
CYMBELLA CUSPIDATA	-	-	-	-	-	-	-	-	-	-
CYMBELLA LEPTOCEROS	-	-	-	-	-	-	-	-	-	-
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
CYMBELLA TUMIDA	-	-	-	-	-	-	-	-	-	-
EUNOTIA CURVATA	-	-	-	-	-	-	-	-	-	-
EUNOTIA TENELLA	-	-	-	-	-	-	-	-	19	-
EUNOTIA SP	-	-	-	-	13	-	-	-	-	-
FRAGILARIA CAPUCINA V MESOLEPTA	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CONSTRUENS	-	-	-	-	-	-	-	-	-	-
FRAGILARIA LEPTOSTAURON	-	-	-	-	-	-	-	-	-	-
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA ACUMINATUM	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA PARVULUM	-	-	-	-	13	-	14	-	-	-
MELOSIRA AMBIGUA	1273	829	784	596	885	681	1496	937	349	1501
MELOSIRA DISTANS	5404	3572	3995	3126	5029	2858	4053	6733	6605	5662
MELOSIRA GRANULATA	-	-	-	-	-	85	-	87	-	45
MELOSIRA GRANULATA V ANGUSTISSIMA	139	76	-	170	-	-	-	-	-	-
MELOSIRA VARIANS	-	-	-	-	-	-	-	-	-	-

TABLE H-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MERIDION CIRCULARE	-	-	-	-	-	-	-	-	-	-
NAVICULA CONSTANS	-	-	-	-	-	-	-	-	-	-
NAVICULA CRYPTOCEPHALA	-	-	-	-	-	-	-	-	-	-
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	-	-	-	-	-
NAVICULA GASTRUM	-	-	-	-	-	-	-	-	-	-
NAVICULA GREGARIA	-	-	-	-	-	-	14	-	-	-
NAVICULA LATENS	-	-	-	-	-	-	-	-	-	-
NAVICULA PUPULA	-	-	-	-	-	-	-	-	-	-
NAVICULA SALINARIUM V INTERMEDIA	-	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	25	-	-	-	-	-	-	-	-
NITZSCHIA ACICULARIS	-	-	-	-	40	-	-	-	-	-
NITZSCHIA CELOGNEI	-	-	-	-	13	-	-	-	-	-
NITZSCHIA HOLSATICA	-	13	-	-	54	-	14	-	-	-
NITZSCHIA KUTZINGIANA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA PALEA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SIGMA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SINUATA V TABELLARIA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SP	35	-	14	-	-	-	14	22	-	-
OPEPHORA MARTYI	-	-	-	-	-	-	-	-	-	-
PINNULARIA MESOLEPTA	-	-	-	-	-	-	-	-	-	-
PINNULARIA SUBCAPITATA	-	-	-	-	-	-	-	-	-	-
RHOPALODIA GIBBA	-	-	-	-	-	-	-	-	-	-
STEPHANODISCUS ASTRAEA	-	-	-	-	-	-	-	-	-	-
SURIRELLA ATOMUS	17	-	-	12	-	-	-	-	19	-
SURIRELLA SP	-	-	-	-	-	-	-	-	-	-
SYNEDRA CAPITATA	-	-	-	-	-	-	-	-	-	-
SYNEDRA DELICATISSIMA	17	-	-	-	-	-	14	-	-	23
SYNEDRA RUMPENS	-	13	-	-	-	-	-	-	-	-
SYNEDRA RUMPENS V FAMILARIS	-	-	-	-	-	-	-	-	19	-
SYNEDRA ULNA	-	-	14	-	-	-	-	-	-	-
TABELLARIA FLOCCULOSA V FLOCCULOSA	-	-	-	-	-	-	-	-	-	-
TERPSINOE MUSICA	-	-	-	-	-	-	-	-	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	-	-	12	-	-	-	23
LEPOCINCLIS TEXTA	-	-	-	-	-	-	-	-	-	-
TRACHELOMONAS SP	17	-	-	-	-	12	14	-	-	-

TABLE H-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PROTOZOA										
CHAOS DIFFUENS	-	-	-	-	-	12	-	-	-	-
UNID CILIOPHORA	-	-	-	-	-	-	14	22	-	45
VORTICELLA SP	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	8731	5103	5837	5619	7118	5020	6371	9044	9550	8891
NUMBER OF TAXA	16	17	11	20	16	19	20	20	19	20

TABLE H-1b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	12	13	14	15	16	17	18	19	******
CYANOPHYTA										
ANABAENA SP	-	-	8	30	-	-	-	-	-	*******
APHANOCAPSA DELICATISSIMA	-	174	-	-	-	-	-	-	-	*******
CHROOCOCCUS DISPERSUS	-	-	32	-	6	-	-	-	135	*******
LYNGEYA CONTORTA	-	-	-	-	-	-	-	223	-	*******
MERISMOPEDIA TENUISSIMA	-	-	-	-	-	-	-	-	-	*******
MICROCYSTIS INCERTA	-	-	-	-	48	-	-	223	154	*******
OSCILLATORIA LIMNETICA	-	-	-	-	10	-	10	-	-	*******
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	-	18	-	-	-	*******
ANKISTRODESMUS FALCATUS	-	32	5	6	5	1	-	-	46	*******
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	1	-	-	-	*******
ANKISTRODESMUS SPIRALIS	31	-	2	-	1	4	2	22	77	*******
CARTERIA SP	-	-	-	6	1	1	-	11	-	*******
CHARACIUM AMBIGUUM	-	10	2	4	-	1	-	-	-	*******
CHLAMYDOMONAS SP	46	-	1	2	-	1	-	11	31	*******
CHLORELLA SP	-	-	5	-	1	-	-	-	31	*******
CHODATELLA CHODATI	31	2	-	-	-	-	-	11	-	*******
CHODATELLA SUBSALSA	-	-	-	-	-	-	-	-	-	*******
COELASTRUM MICROPORUM	-	-	-	-	-	-	-	-	-	*******
COELASTRUM PROBOSCIDEUM	-	-	-	-	-	-	-	-	-	*******
CRUCIGENIA QUADRATA	-	-	-	-	-	-	-	-	-	*******
CRUCIGENIA TETRAPEDIA	61	10	-	-	-	5	-	-	-	*******
DICTYOSPHAERIUM PULCHELLUM	-	-	12	9	8	5	3	156	61	*******
ELAKATOTHRIX GELATINOSA	15	-	2	-	-	-	-	-	-	*******
EUASTRUM SP	-	2	-	-	-	-	-	-	-	*******
GOLENKINIA RADIATA	-	-	1	-	5	2	4	-	-	*******
KIRCHNERIELLA LUNARIS	-	-	-	-	1	1	-	-	-	*******
KIRCHNERIELLA OBESA	-	-	-	-	-	-	-	-	-	*******
OOCYSTIS SP	-	82	-	-	-	-	-	-	-	*******

TABLE H-1b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
	NUMBER OF ORGANISMS AT STATION:									
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	89	-	*******
SCENEDESMUS ABUNDANS	-	15	-	9	2	-	-	22	-	*******
SCENEDESMUS ACUMINATUS	-	-	-	-	10	1	-	-	-	*******
SCENEDESMUS ARMATUS	-	10	-	-	4	-	-	-	-	*******
SCENEDESMUS ARMATUS V BICAUDATA	46	-	-	-	4	-	3	-	-	*******
SCENEDESMUS BIJUGA	31	45	-	-	-	-	-	-	-	*******
SCENEDESMUS QUADRICAUDA	61	100	10	43	2	2	-	-	154	*******
SCENEDESMUS SP	31	15	-	-	2	-	-	-	-	*******
SCHROEDERIA SETIGERA	-	-	-	-	-	-	P	-	-	*******
SELANASTRUM MINUTUM	-	-	-	-	-	2	P	-	-	*******
SPONDYLOSIUM PLANUM	15	-	-	-	3	-	-	-	-	*******
TETRAEDRON CAUDATUM	-	2	-	-	-	-	-	-	-	*******
TETRAEDRON REGULARE	15	2	-	-	-	-	-	-	-	*******
TETRASTRUM STAUROGENIFORME	-	-	-	-	-	-	-	-	-	*******
TREUBARIA SETIGERUM	-	-	-	-	-	-	-	-	-	*******
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	15	-	-	-	1	2	-	-	*******
CRYPTOMONAS SP	-	15	-	2	-	-	-	-	-	*******
PYRRHOPHYTA										
GLENODINIUM SP	-	7	-	-	-	-	-	-	-	*******
PERIDINIUM SP	-	-	-	-	-	-	-	-	-	*******
XANTHOPHYCEAE										
OPHIOCYTIUM CAPITATUM V LONGISPINUM	-	2	-	-	-	-	-	-	-	*******

TABLE H-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
CHRYSOPHYCEAE										
DINOBRYON BAVARICUM	-	47	-	-	1	-	-	-	92	********
DINOBRYON DIVERGENS	-	42	-	4	-	1	-	-	-	********
UNID CHRYSOPHYCEAE	-	-	-	-	-	-	-	-	-	********
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	15	2	2	9	3	1	P	-	46	********
ACHNANTHES SP	-	-	-	-	1	-	-	-	-	********
AMPHORA PERPUSSILLA	-	-	-	-	-	-	3	-	-	********
ASTERIONELLA FORMOSA	92	-	-	-	-	-	-	111	61	********
COCCONEIS PLACENTULA V EUGLYPTA	15	2	1	9	-	1	-	-	-	********
COSCINODISCUS SP	15	2	-	-	-	-	-	-	15	********
CYCLOTELLA CATENATA	15	-	1	-	-	-	P	33	-	********
CYCLOTELLA SP	123	-	5	-	3	1	-	122	185	********
CYCLOTELLA COMTA	-	-	-	4	-	-	-	-	-	********
CYCLOTELLA GLOMERATA	-	-	1	19	6	8	-	44	-	********
CYCLOTELLA MENEGHINIANA	-	-	-	-	-	-	-	11	-	********
CYCLOTELLA STELLIGERA	108	10	18	2	7	2	P	133	138	********
CYMBELLA CUSPIDATA	-	-	-	2	-	-	-	-	-	********
CYMBELLA LEPTOCEROS	-	-	-	15	-	-	-	-	-	********
CYMBELLA MICROCEPHALA	-	17	1	9	1	-	-	-	-	********
CYMBELLA TUMIDA	-	-	-	6	1	-	P	-	-	********
EUNOTIA CURVATA	-	-	-	-	-	-	P	-	-	********
EUNOTIA TENELLA	-	-	-	-	-	-	-	-	-	********
EUNOTIA SP	-	-	-	-	-	-	-	-	-	********
FRAGILARIA CAPUCINA V MESOLEPTA	-	-	1	-	-	-	-	-	-	********
FRAGILARIA CONSTRUENS	-	2	-	13	-	-	-	-	-	********
FRAGILARIA LEPTOSTAURON	15	47	1	86	3	-	-	-	-	********
FRAGILARIA PINNATA	-	7	4	11	2	2	-	-	-	********
GOMPHONEMA ACUMINATUM	-	2	-	-	-	-	-	-	-	********
GOMPHONEMA PARVULUM	-	2	-	-	-	1	-	11	-	********
MELOSIRA AMBIGUA	615	-	6	-	17	-	6	378	923	********
MELOSIRA DISTANS	5092	32	13	26	17	2	P	3260	461	********
MELOSIRA GRANULATA	31	-	2	-	-	-	-	-	-	********
MELOSIRA GRANULATA V ANGUSTISSIMA	31	-	-	-	-	-	-	-	-	********
MELOSIRA VARIANS	31	-	-	-	-	-	-	11	-	********

TABLE H-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MERIDION CIRCULARE	-	-	-	4	1	-	-	-	-	********
NAVICULA CONSTANS	-	-	-	-	-	1	-	-	-	********
NAVICULA CRYPTOCEPHALA	-	2	-	2	4	-	-	-	-	********
NAVICULA EXIGUA V CAPITATA	31	-	21	2	9	2	P	-	15	********
NAVICULA GASTRUM	-	-	-	2	-	-	-	-	-	********
NAVICULA GREGARIA	-	-	-	2	-	-	-	-	-	********
NAVICULA LATENS	-	-	-	-	1	-	-	-	-	********
NAVICULA PUPULA	-	10	1	4	3	-	P	-	-	********
NAVICULA *SALINARIUM V INTERMEDIA*	-	5	-	9	7	2	2	-	-	********
NAVICULA SP	-	2	4	6	2	4	-	-	-	********
NITZSCHIA ACICULARIS	-	-	4	6	6	8	-	11	-	********
NITZSCHIA CELOGNEI	-	-	-	-	-	-	-	-	-	********
NITZSCHIA HOLSATICA	-	-	2	4	2	-	P	-	-	********
NITZSCHIA KUTZINGIANA	-	-	1	2	1	-	-	-	-	********
NITZSCHIA PALEA	-	-	-	-	2	-	-	-	-	********
NITZSCHIA PALEACEA	-	-	1	-	-	-	-	-	-	********
NITZSCHIA SIGMA	-	-	-	-	1	-	-	-	-	********
NITZSCHIA SINUATA V TABELLARIA	-	-	-	4	-	-	-	-	-	********
NITZSCHIA SP	15	-	1	4	2	1	-	-	-	********
OPEPHORA MARTYI	-	-	-	58	-	-	-	-	-	********
PINNULARIA MESOLEPTA	-	-	-	-	-	1	-	-	-	********
PINNULARIA SUBCAPITATA	-	-	1	-	-	-	-	-	-	********
RHOPALODIA GIBBA	-	2	-	-	-	-	-	-	-	********
STEPHANODISCUS ASTRAEA	-	-	2	-	-	-	-	-	-	********
SURIRELLA ATOMUS	-	-	1	2	-	-	P	-	-	********
SURIRELLA SP	-	-	-	2	-	-	-	-	-	********
SYNEDRA CAPITATA	-	-	1	-	-	-	-	-	-	********
SYNEDRA DELICATISSIMA	-	7	2	6	5	4	3	11	-	********
SYNEDRA RUMPENS	-	-	6	4	3	-	P	-	-	********
SYNEDRA RUMPENS V FAMILARIS	-	-	-	-	-	-	-	-	-	********
SYNEDRA ULNA	-	-	-	-	-	1	-	-	-	********
TABELLARIA FLOCCULOSA V FLOCCULOSA	-	2	-	-	-	-	-	-	-	********
TERPSINOE MUSICA	-	-	-	-	-	1	-	-	-	********
EUGLENOPHYTA										
EUGLENA SP	31	7	-	2	-	-	-	-	-	********
LEPOCINCLIS TEXTA	-	10	-	-	-	-	-	-	-	********
TRACHELOMONAS SP	-	-	-	-	-	-	-	-	-	********

TABLE H-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
PROTOZOA										
CHAOS DIFFLENS	-	-	-	-	-	-	-	-	-	******
UNID CILIOPHORA	31	15	13	-	3	-	3	-	15	******
VORTICELLA SP	-	-	1	-	-	-	-	-	-	******
TOTAL NUMBER OF ORGANISMS	6689	816	198	421	227	90	54	4904	2643	******
NUMBER OF TAXA	28	41	40	42	45	34	24	21	18	******

TABLE H-2a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
APHANOCAPSA ELACHISTA	-	-	-	-	-	-	-	1331	784	1430
APHANOTHECE NIDULANS	-	-	-	-	-	-	-	-	-	-
CHROOCOCCUS DISPERSUS	-	-	221	-	-	-	-	-	-	279
LYNGBYA CONTORTA	-	-	-	-	-	-	-	190	-	-
MERISMOPEDIA TENUISSIMA	-	-	-	-	-	-	-	-	-	-
MICROCYSTIS INCERTA	-	-	2012	-	628	-	407	-	4358	4184
OSCILLATORIA LIMNETICA	-	-	-	-	-	-	145	-	-	-
CHLOROPHYTA										
ANKISTRODESMUS FALCATUS	15	-	-	30	-	32	-	-	44	35
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	-	-	-	-
ANKISTRODESMUS SPIRALIS	30	17	20	30	-	16	58	-	131	-
CARTERIA SP	-	-	-	-	-	-	-	-	-	-
CHLAMYDOMONAS SP	-	-	-	-	-	-	14	24	44	-
CHLORELLA SP	-	-	-	15	-	16	-	-	-	-
CHLOROCOCCUM HUMICOLA	-	-	-	-	-	-	-	-	-	-
CHODATELLA CHODATI	-	-	-	-	-	-	-	-	-	-
CLOSTERIUM MONILIFERUM	-	-	-	-	21	-	-	-	-	-
COELASTRUM MICROPORUM	-	-	-	-	-	-	-	-	-	-
COSMARIUM TRILOBULATUM	-	-	-	-	-	-	-	-	-	-
COSMARIUM SP	-	-	-	-	-	-	-	-	-	-
CRUCIGENIA APICULATA	-	349	-	-	-	-	-	-	-	-
CRUCIGENIA FENESTRATA	-	-	-	60	-	-	-	-	-	-
CRUCIGENIA QUADRATA	-	-	-	-	-	-	-	-	-	-
CRUCIGENIA TETRAPEDIA	45	-	-	-	-	-	-	-	-	-
DICTYOSPHAERIUM EHRENBERGIANUM	-	-	-	-	-	-	-	1141	219	139
DICTYOSPHAERIUM PULCHELLUM	-	70	-	374	125	317	581	309	349	-

TABLE H-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	-	-	-
EUASTRUM SP	15	-	-	-	-	-	-	-	-	-
GOLENKINIA RADIATA	-	-	-	15	21	-	-	-	-	-
GONIUM PECTORALE	-	-	-	-	-	-	-	-	-	-
KIRCHNERIELLA LUNARIS	-	-	-	-	-	47	14	24	44	35
KIRCHNERIELLA OBESA	-	-	-	-	-	-	-	-	-	-
MOUGEOTIA SP	-	-	-	-	-	-	-	-	-	-
OOCYSTIS SP	-	-	20	-	-	-	14	117	-	139
PANDORINA MORUM	15	-	-	-	-	16	-	-	-	-
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	95	-	-
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	232	-	-	-
SCENEDESMUS ABUNDANS	-	-	40	-	-	63	-	-	-	-
SCENEDESMUS ACUMINATUS	-	70	-	-	-	-	-	-	-	-
SCENEDESMUS ARMATUS	-	70	-	60	-	-	29	285	174	139
SCENEDESMUS ARMATUS V BICAUDATA	60	-	-	60	-	127	58	-	-	-
SCENEDESMUS BIJUGA	-	-	-	-	-	-	87	-	-	-
SCENEDESMUS DENTICULATUS	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS QUADRICAUDA	149	174	80	60	42	317	29	238	174	70
SCENEDESMUS SP	-	-	-	-	-	-	-	47	174	-
SELENASTRUM MINUTUM	-	-	-	-	-	-	-	24	-	-
TETRAEDRON CAUDATUM	-	-	-	-	-	-	14	-	-	-
TETRAEDRON MINIMUM	-	17	-	-	-	-	-	-	-	-
TETRAEDRON REGULARE	-	-	-	-	-	-	-	-	-	-
TETRAEDRON TRIGONUM	15	-	-	-	-	-	-	-	-	-
TETRASTRUM STAUROGENIFORME	45	70	-	60	167	190	203	285	174	139
TREUBARIA SETIGERUM	-	-	-	15	21	-	-	-	-	-
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	-	-	-	-	-	-	-	-
PYRRHOPHYTA										
GLENODINIUM SP	-	-	-	-	-	-	-	-	87	70

TABLE H-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	-	-	30	-	-	-	-	-	35
DINOBRYON BAVARICUM	-	-	-	-	-	-	-	-	-	-
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	-	-	35
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES SP	-	-	-	30	-	-	44	24	174	-
ACHNANTHES LANCEOLATA V DUBIA	-	-	-	-	-	-	-	-	-	-
AMPHORA OVALIS	-	-	-	-	-	-	-	-	-	-
ASTERIONELLA FORMOSA	90	-	-	30	42	47	-	119	87	70
CAPARTOGRAMMA CRUCICULA	-	-	20	-	-	-	-	-	-	-
COCCONEIS PLACENTULA	-	-	-	-	-	-	-	-	-	-
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA CATENATA	60	-	-	-	-	16	-	-	-	-
CYCLOTELLA SP	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	-	17	-	-	105	79	-	-	-	-
CYCLOTELLA MENEGHINIANA	-	17	-	-	-	-	14	-	-	-
CYCLOTELLA STELLIGERA	60	349	342	75	42	127	218	214	131	349
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
CYMBELLA MINUTA	-	-	-	-	-	-	-	-	-	-
CYMBELLA TUMIDA	-	-	-	-	-	-	-	24	-	-
CYMBELLA VENTRICOSA	-	-	-	-	-	-	-	-	-	-
CYMBELLA SP	-	17	-	-	-	-	-	-	-	-
EUNOTIA PECTINALIS	15	-	-	-	-	-	-	-	-	-
EUNOTIA TENELLA	15	-	-	-	-	-	-	-	-	-
EUNOTIA SP	15	-	-	-	-	-	-	-	-	-
FRAGILARIA CONSTRUENS	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CROTONENSIS	-	-	-	-	-	-	-	-	-	244
FRAGILARIA LEPTOSTAURON	-	-	-	-	-	-	-	-	-	-
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA ACUMINATUM	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA PARVULUM	15	-	40	-	-	-	-	-	-	-
GOMPHONEMA TRUNCATUM	-	-	-	-	-	-	-	-	-	-
MELOSIRA AMBIGUA	194	436	342	613	648	111	654	547	872	1430
MELOSIRA DISTANS	4020	3312	4265	3691	5795	3901	4402	6585	18741	14575
MELOSIRA GRANULATA	30	70	40	90	125	-	-	-	-	70

TABLE H-2a (cont.)

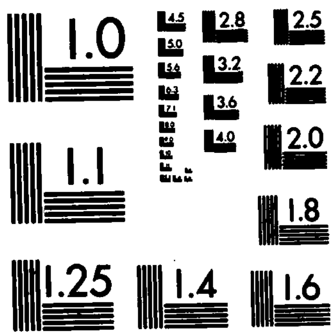
TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
	NUMBER OF ORGANISMS AT STATION:									
MELOSIRA GRANULATA V ANGUSTISSIMA	-	-	-	-	-	-	-	-	-	-
MELOSIRA VARIANS	-	35	-	-	42	32	-	-	-	-
MERIDION CIRCULARE	-	-	-	-	-	-	-	-	-	-
NAVICULA CRYPTOCEPHALA	-	17	-	-	-	-	14	-	-	-
NAVICULA EXIGUA V CAPITATA	-	-	20	-	-	-	-	-	-	-
NAVICULA GASTRUM	-	-	-	-	-	-	-	-	-	-
NAVICULA LACUSTRIS	-	-	-	-	-	-	-	-	-	-
NAVICULA LATENS	-	-	-	-	-	-	-	-	-	-
NAVICULA LATEROPUNCTATA	-	-	-	-	21	-	-	-	-	-
NAVICULA PUPULA	-	-	-	15	-	-	-	-	44	-
NAVICULA RHYNCOCEPHALA V GERMANII	-	-	-	-	-	-	-	-	-	-
NAVICULA SALINARIUM V INTERMEDIA	-	-	-	-	-	-	-	-	-	-
NAVICULA SCUTELLOIDES	-	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	-	20	-	-	-	-	-	-	-
NITZSCHIA ACICULARIS	30	17	20	-	-	32	14	-	44	-
NITZSCHIA HOLSATICA	-	-	-	-	-	16	-	24	-	-
NITZSCHIA IGNORATA	-	17	-	-	-	-	-	-	-	-
NITZSCHIA KUTZINGIANA	15	-	-	15	-	-	-	-	-	-
NITZSCHIA PALEA	-	17	20	-	-	16	-	-	-	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	24	-	-
NITZSCHIA SINUATA V TABELLARIA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	17	-	-	-	-	-	-	-	-
NITZSCHIA SP	-	-	-	15	21	16	-	-	44	-
OPEPHORA MARTYI	-	-	-	-	-	-	-	-	-	-
STEPHANODISCUS ASTRAEA V MINUTULA	-	-	-	-	-	16	-	-	-	-
STEPHANODISCUS INVISITATUS	-	-	-	-	-	-	-	-	-	-
STEPHANODISCUS SP	-	-	-	15	-	-	-	-	-	-
SURIRELLA ATOMUS	-	-	-	-	-	-	14	-	-	-
SURIRELLA SP	-	-	-	-	-	-	-	-	-	35
SYNEDRA DELICATISSIMA	15	-	-	-	21	-	-	-	-	-
SYNEDRA RUMPENS	-	-	-	30	-	-	-	-	-	-
SYNEDRA ULNA	-	-	-	-	-	-	-	24	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	-	42	-	-	-	44	35
TRACHELOMONAS SP	-	-	-	-	-	16	-	-	-	-

TABLE H-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PROTOZOA										
CHAOS DIFFLENS	-	-	-	-	-	-	-	24	-	-
UNID CILIOPHORA	-	35	-	15	21	-	29	24	-	35
ROTIFERA										
UNID ROTIFER	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	4963	5210	7522	5443	7950	4866	7289	11745	26936	23572
NUMBER OF TAXA	22	22	16	24	19	23	23	24	22	22

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 5/8

UNCLASSIFIED DACW01-78-C-0101 F/G 8/8 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE H-2b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	13	14	15	16	17	18	19	******	******
CYANOPHYTA										
APHANOCAPSA ELACHISTA	991	-	-	-	-	-	-	-	******	******
APHANOTHECE NIDULANS	-	-	-	-	-	-	304	155	******	******
CHROOCOCCUS DISPERSUS	-	75	22	190	28	56	202	271	******	******
LYNGBYA CONTORTA	-	-	-	-	-	-	-	-	******	******
MERISMOPEDIA TENUISSIMA	-	-	-	-	-	-	270	-	******	******
MICROCYSTIS INCERTA	-	140	202	38	70	15	1012	1588	******	******
OSCILLATORIA LIMNETICA	-	-	-	-	-	-	-	-	******	******
CHLOROPHYTA										
ANKISTRODESMUS FALCATUS	27	23	34	19	3	4	17	19	******	******
ANKISTRODESMUS NANNOSELENE	-	-	3	-	-	-	-	-	******	******
ANKISTRODESMUS SPIRALIS	110	9	17	9	5	3	86	-	******	******
CARTERIA SP	-	-	-	14	-	1	-	-	******	******
CHLAMYDOMONAS SP	-	37	-	86	5	4	17	77	******	******
CHLORELLA SP	-	-	-	-	2	1	-	19	******	******
CHLOROCOCCUM HUMICOLA	-	-	-	5	-	-	-	-	******	******
CHODATELLA CHODATI	-	-	-	-	-	1	17	-	******	******
CLOSTERIUM MONILIFERUM	-	-	-	-	-	-	-	-	******	******
COELASTRUM MICROPORUM	-	37	-	76	-	-	-	232	******	******
COSMARIUM TRILOBULATUM	-	-	3	-	-	-	-	-	******	******
COSMARIUM SP	-	-	3	-	-	-	-	-	******	******
CRUCIGENIA APICULATA	-	-	-	-	-	-	-	-	******	******
CRUCIGENIA FENESTRATA	-	-	-	-	-	-	-	-	******	******
CRUCIGENIA QUADRATA	-	-	-	-	-	-	34	-	******	******
CRUCIGENIA TETRAPEDIA	-	19	-	-	-	-	-	-	******	******
DICTYOSPHAERIUM EHRENBERGIANUM	-	-	-	-	-	-	232	-	******	******
DICTYOSPHAERIUM PULCHELLUM	440	-	-	114	17	2	-	-	******	******

TABLE H-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	13	14	15	16	17	18	19	******	******
DYSMORPHOCOCCUS VARIABILIS	-	-	-	19	-	-	-	19	*******	*******
EUASTRUM SP	-	-	-	-	-	-	-	-	*******	*******
GOLENKINIA RADIATA	-	-	3	19	-	1	-	-	*******	*******
GONIUM PECTORALE	-	-	-	147	24	6	-	-	*******	*******
KIRCHNERIELLA LUNARIS	-	-	11	5	3	-	17	-	*******	*******
KIRCHNERIELLA OBESA	-	-	17	-	-	-	-	-	*******	*******
MOUGEOTIA SP	-	-	8	-	-	-	-	-	*******	*******
OOCYSTIS SP	-	19	-	-	-	-	-	-	*******	*******
PANDORINA MORUM	-	209	-	418	63	-	-	116	*******	*******
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	-	*******	*******
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	-	-	*******	*******
SCENEDESMUS ABUNDANS	-	-	6	-	-	-	34	-	*******	*******
SCENEDESMUS ACUMINATUS	-	-	-	-	-	-	-	-	*******	*******
SCENEDESMUS ARMATUS	55	-	17	-	-	-	67	-	*******	*******
SCENEDESMUS ARMATUS V BICAUDATA	-	-	6	-	3	6	67	-	*******	*******
SCENEDESMUS BIJUGA	-	-	-	-	-	-	-	-	*******	*******
SCENEDESMUS DENTICULATUS	-	-	-	19	-	4	-	-	*******	*******
SCENEDESMUS QUADRICAUDA	220	19	34	19	7	-	-	77	*******	*******
SCENEDESMUS SP	-	-	28	9	-	-	67	-	*******	*******
SELENASTRUM MINUTUM	-	-	-	-	3	-	-	-	*******	*******
TETRAEDRON CAUDATUM	-	-	3	-	-	-	-	19	*******	*******
TETRAEDRON MINIMUM	-	-	-	-	-	-	-	-	*******	*******
TETRAEDRON REGULARE	27	-	-	-	-	-	-	-	*******	*******
TETRAEDRON TRIGONUM	-	-	-	-	-	-	-	-	*******	*******
TETRASTRUM STAUROGENIFORME	110	56	-	38	7	4	-	-	*******	*******
TREUBARIA SETIGERUM	-	-	-	-	-	-	-	-	*******	*******
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	5	-	-	-	-	-	-	*******	*******
PYRRHOPHYTA										
GLENODINIUM SP	-	-	-	-	2	1	-	-	*******	*******

TABLE H-2b (cont.)

TAXONOMIC CLASSIFICATION	11	13	14	15	16	17	18	19	******	******
	NUMBER OF ORGANISMS AT STATION:									
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	27	-	8	-	-	-	-	-	*******	*******
DINOBRYON BAVARICUM	-	-	8	-	-	-	-	-	*******	*******
DINOBRYON DIVERGENS	-	19	8	-	-	-	-	-	*******	*******
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES SP	27	14	8	5	2	-	51	19	*******	*******
ACHNANTHES LANCEOLATA V DUBIA	-	14	14	5	3	2	17	19	*******	*******
AMPHORA OVALIS	-	-	3	-	-	-	-	-	*******	*******
ASTERIONELLA FORMOSA	-	-	-	-	-	7	169	-	*******	*******
CAPARTOGRAMMA CRUCICULA	-	-	-	-	-	-	-	-	*******	*******
COCCONEIS PLACENTULA	-	-	3	-	-	-	-	-	*******	*******
COCCONEIS PLACENTULA V EUGLYPTA	-	-	6	-	-	-	-	-	*******	*******
CYCLOTELLA CATENATA	-	5	-	-	-	-	-	-	*******	*******
CYCLOTELLA SP	110	-	-	5	3	-	-	-	*******	*******
CYCLOTELLA GLOMERATA	110	392	17	157	71	2	118	310	*******	*******
CYCLOTELLA MENEGHINIANA	-	-	3	24	-	1	17	-	*******	*******
CYCLOTELLA STELLIGERA	193	131	-	47	9	12	287	116	*******	*******
CYMBELLA MICROCEPHALA	-	-	45	-	-	-	-	-	*******	*******
CYMBELLA MINUTA	-	-	3	-	-	-	-	-	*******	*******
CYMBELLA TUMIDA	-	-	-	-	-	-	-	-	*******	*******
CYMBELLA VENTRICOSA	-	-	8	-	-	-	-	-	*******	*******
CYMBELLA SP	-	-	-	-	-	-	-	-	*******	*******
EUNOTIA PECTINALIS	-	-	-	-	-	-	-	-	*******	*******
EUNOTIA TENELLA	-	-	3	-	-	-	-	-	*******	*******
EUNOTIA SP	-	-	-	-	-	-	-	-	*******	*******
FRAGILARIA CONSTRUENS	-	-	83	-	-	-	-	-	*******	*******
FRAGILARIA CROTONENSIS	-	-	-	-	-	-	-	-	*******	*******
FRAGILARIA LEPTOSTAURON	-	-	6	-	-	-	-	-	*******	*******
FRAGILARIA PINNATA	-	-	14	-	-	1	-	-	*******	*******
GOMPHONEMA ACUMINATUM	-	-	3	-	-	-	-	-	*******	*******
GOMPHONEMA PARVULUM	-	-	-	9	2	2	-	-	*******	*******
GOMPHONEMA TRUNCATUM	-	-	3	-	-	-	-	-	*******	*******
MELOSIRA AMBIGUA	83	8	-	-	26	-	371	523	*******	*******
MELOSIRA DISTANS	12938	275	-	81	37	83	4488	4765	*******	*******
MELOSIRA GRANULATA	-	-	-	-	-	-	-	39	*******	*******

TABLE H-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	13	14	15	16	17	18	19	******	******
MELOSIRA GRANULATA V ANGUSTISSIMA	-	37	-	-	7	-	101	-	*******	*******
MELOSIRA VARIANS	-	9	-	-	-	3	-	-	*******	*******
MERIDION CIRCULARE	-	-	3	-	-	-	-	-	*******	*******
NAVICULA CRYPTOCEPHALA	-	-	6	5	3	3	-	-	*******	*******
NAVICULA EXIGUA V CAPITATA	27	9	8	14	3	1	-	-	*******	*******
NAVICULA GASTRUM	-	-	3	5	-	-	-	-	*******	*******
NAVICULA LACUSTRIS	-	-	3	-	-	-	-	-	*******	*******
NAVICULA LATENS	-	-	3	-	-	-	-	-	*******	*******
NAVICULA LATEHOPUNCTATA	-	-	-	-	-	-	-	-	*******	*******
NAVICULA PUPULA	-	-	11	9	2	1	-	-	*******	*******
NAVICULA RHYNCOCEPHALA V GERMANII	-	-	3	-	-	-	-	-	*******	*******
NAVICULA SALINARIUM V INTERMEDIA	-	5	8	-	2	1	-	-	*******	*******
NAVICULA SCUTELLOIDES	-	-	3	-	-	-	-	-	*******	*******
NAVICULA SP	-	-	-	-	2	1	-	-	*******	*******
NITZSCHIA ACICULARIS	-	-	6	19	2	7	-	-	*******	*******
NITZSCHIA HOLSATICA	-	-	11	-	17	12	34	97	*******	*******
NITZSCHIA IGNORATA	-	-	-	-	-	-	-	-	*******	*******
NITZSCHIA KUTZINGIANA	27	5	-	-	3	1	-	-	*******	*******
NITZSCHIA PALEA	-	-	-	-	2	-	-	-	*******	*******
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	*******	*******
NITZSCHIA SINUATA V TABELLARIA	-	-	3	-	-	-	-	-	*******	*******
NITZSCHIA THYALICNELLA V VICTORIAE	-	-	-	-	-	1	-	-	*******	*******
NITZSCHIA SP	-	5	3	9	-	1	-	-	*******	*******
OPEPHORA MARTYI	-	-	17	-	-	-	-	-	*******	*******
STEPHANODISCUS ASTRAEA V MINUTULA	27	9	-	-	-	-	-	-	*******	*******
STEPHANODISCUS INVISITATUS	-	9	-	171	38	-	-	-	*******	*******
STEPHANODISCUS SP	-	9	-	-	-	-	-	-	*******	*******
SURIRELLA ATOMUS	-	-	-	5	2	-	-	-	*******	*******
SURIRELLA SP	-	-	-	-	-	-	-	-	*******	*******
SYNEDRA DELICATISSIMA	-	-	8	14	3	3	-	19	*******	*******
SYNEDRA RUMPENS	-	-	6	-	5	3	-	-	*******	*******
SYNEDRA ULNA	-	-	6	-	-	-	-	-	*******	*******
EUGLENOPHYTA										
EUGLENA SP	27	5	-	8	2	1	-	-	*******	*******
TRACHELOMONAS SP	-	-	3	9	-	-	-	-	*******	*******

TABLE H-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	13	14	15	16	17	18	19	******	******
PROTOZOA										
CHAOS DIFFUENS	-	-	-	-	-	-	-	-	*******	*******
UNID CILIOPHORA	55	42	3	24	5	1	101	39	*******	*******
ROTIFERA										
UNID ROTIFER	-	5	-	-	-	1	-	-	*******	*******
TOTAL NUMBER OF ORGANISMS	15631	1742	750	1866	493	260	8165	8538	******	******
NUMBER OF TAXA	20	32	56	38	39	39	26	21	******	******

TABLE H-3a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
ANABAENA SP	-	-	-	-	-	-	-	179	-	-
APHANIZOMENON FLOS-AQUAE	-	-	-	-	-	-	-	-	-	-
APHANOCAPSA DELICATISSIMA	-	-	-	-	386	413	283	166	-	392
APHANOCAPSA ELACHISTA	-	-	-	-	-	-	-	510	-	-
APHANOTHECE CLATHRATA	-	-	-	-	-	-	-	-	-	-
ARTHROSPIRA JENNERI	-	-	-	-	-	-	-	-	-	-
CHROOCOCCUS DISPERSUS	302	37	-	105	174	268	622	434	371	222
CHROOCOCCUS LIMNETICUS	-	-	-	-	-	-	-	-	-	-
GLOEOCAPSA RUPESTRIS	-	-	-	-	-	-	-	-	-	-
GOMPHOSPHAERIA LACUSTRIS	-	-	-	-	-	-	-	-	-	-
LYNGBYA CONTORTA	50	-	-	87	-	-	-	-	-	-
MERISMOPEDIA GLAUCA	-	-	-	-	-	-	-	-	-	-
MERISMOPEDIA TENUISSIMA	805	149	1014	174	2764	2019	3901	2908	1620	1046
OSCILLATORIA LIMNETICA	-	-	-	-	-	-	-	-	-	131
OSCILLATORIA SP	-	-	-	-	-	-	-	-	-	-
PHORMIDIUM TENUE	-	-	-	-	-	-	-	-	-	-
POLYCYSTIS AERUGINOSA	-	-	-	-	-	-	-	-	-	-
POLYCYSTIS INCERTA	-	-	-	-	-	-	-	255	-	-
SPIRULINA LAXA	-	-	-	-	-	-	-	-	-	-
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	-	-	-	-	-	-
ANKISTRODESMUS FALCATUS	-	19	-	-	-	-	42	38	51	78
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	-	64	-	-
ANKISTRODESMUS SPIRALIS	-	-	-	-	-	-	14	-	67	52
CARTERIA SP	-	-	-	-	-	-	-	-	17	-
CHLAMYDOMONAS SP	20	-	-	-	-	24	28	25	17	13

TABLE H-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CHLORELLA SP	-	-	-	-	-	-	-	-	17	13
CHLOROGONIUM EUCHLORUM	-	-	-	-	-	-	-	-	-	-
CHODATELLA CHODATI	-	-	-	-	-	-	-	-	-	-
CHODATELLA SUBSALSA	-	-	-	-	-	-	-	-	-	-
CLOSTERIUM SP	-	-	-	-	-	-	-	-	-	-
COELASTRUM MICROPORUM	80	84	-	157	12	195	14	-	67	-
COELASTRUM MORUS	-	-	-	-	-	-	-	-	-	-
COELASTRUM SPHAERICUM	322	-	-	-	-	401	113	612	388	91
COSMARIUM SP	-	-	-	-	-	-	-	-	-	-
CRUCIGENIA APICULATA	-	75	-	244	-	-	-	-	67	105
CRUCIGENIA QUADRATA	-	-	-	-	-	-	-	-	-	-
CRUCIGENIA TETRAPEDIA	40	-	63	-	-	-	-	-	219	-
DICTYOSPHAERIUM PULCHELLUM	201	-	-	-	299	-	-	-	135	-
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	-	-	-
[illegible]TRUM SP	-	-	-	-	-	49	-	-	-	-
GOLENKINIA RADIATA	-	-	-	-	12	-	14	-	67	26
GONIUM PECTORALE	-	-	-	-	-	-	-	-	-	-
KIRCHNERIELLA LUNARIS	-	9	16	35	-	24	170	38	337	65
KIRCHNERIELLA OBESA	10	65	16	-	-	-	-	13	17	13
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	-	-	-	-	-	-
OOCYSTIS SP	10	-	47	-	50	-	56	-	-	-
PANDORINA MORUM	-	-	-	-	-	-	-	-	-	-
PEDIASTRUM BIRADIATUM	-	-	-	70	-	49	-	102	304	52
PEDIASTRUM BORYANUM	-	-	-	-	-	-	-	-	-	-
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	199	-	-	-	-	-
PEDIASTRUM OBTUSUM	80	47	-	-	-	-	-	-	-	105
PEDIASTRUM TETRAS	-	-	63	-	-	-	-	-	-	-
PEDIASTRUM TETRAS V TETRAODON	-	37	-	-	-	-	-	-	67	-
POLYEDRIOPSIS SPINULOSA	-	-	-	-	-	-	-	-	-	-
PTEROMONAS SP	-	-	-	-	-	-	-	-	17	-
RADIOCOCCUS NIMBATUS	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS ABUNDANS	-	19	32	38	100	-	113	102	-	52
SCENEDESMUS ACUMINATUS	-	-	-	-	-	-	14	25	17	-
SCENEDESMUS ARMATUS	40	-	95	113	124	49	-	51	270	-
SCENEDESMUS ARMATUS V BICAUDATA	40	96	63	52	-	-	141	204	135	26
SCENEDESMUS BIJUGA	20	112	190	-	-	73	71	76	-	105
SCENEDESMUS DENTICULATUS	-	-	-	17	-	-	-	-	-	-
SCENEDESMUS QUADRICAUDA	151	196	238	139	286	146	297	204	270	248
SCENEDESMUS SP	20	9	63	-	-	-	-	25	-	-
SCHROEDERIA SETIGERA	-	75	47	26	25	36	28	-	34	13
SELENASTRUM MINUTUM	10	9	-	35	100	-	28	13	67	-
SORASTRUM SPINULOSUM	-	-	-	-	-	-	-	-	-	-
SPERMATOZOOPSIS EXILTANS	-	-	-	-	-	-	-	-	17	26
SPONDYLOSIUM PLANUM	-	-	-	-	-	-	-	-	-	26
STAURASTRUM SP	10	-	32	17	-	12	-	-	17	-

TABLE H-3a (cont.)

TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
					NUMBER OF ORGANISMS AT STATION:					
TETRAEDRON CAUDATUM	10	19	-	-	-	-	-	-	-	13
TETRAEDRON MINIMUM	10	19	32	9	-	24	-	-	-	13
TETRAEDRON MUTICUM	-	-	-	-	-	-	-	-	-	-
TETRAEDRON REGULARE	-	9	-	-	-	-	-	-	-	-
TETRAEDRON REGULARE V INCUS	-	-	-	-	-	-	-	13	-	-
TETRAEDRON TRIGONUM	10	-	-	-	-	-	-	-	17	-
TETRASTRUM STAUROGENIFORME	-	-	127	-	-	-	56	-	135	157
TREUBARIA SETIGERUM	-	-	-	-	-	-	-	-	17	13
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	-	-	-	-	-	-	-	-
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	-	-	-	-	-	-	-
GLENODINIUM SP	-	-	-	-	-	12	-	13	51	13
PERIDINIUM SP	-	-	-	-	-	-	-	-	-	26
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	[illegible]	[illegible]	-	-	-	-	-	-	-	52
CENTRITRACTUS BEL[illegible]	[illegible]	-	-	-	-	-	-	-	-	-
OPHIOCYTIUM CAPITATUM	[illegible]	-	-	-	-	-	-	-	-	-
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	[illegible]	[illegible]	-	-	-	-	-	-	101	91
DINOBRYON BAVARICUM	-	-	-	-	-	-	-	-	-	-
LAGYNION SCHERFFELII	-	-	-	-	-	-	-	-	-	-

TABLE H-3a (cont.)

TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
	NUMBER OF ORGANISMS AT STATION:									
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES CLEVEI	-	-	-	-	-	-	-	-	-	-
ACHNANTHES SP	-	-	-	-	-	-	-	-	-	-
ACHNANTHES LANCEOLATA V DUBIA	-	9	-	-	12	-	-	-	-	-
ASTERIONELLA FORMOSA	90	47	16	-	-	146	127	51	34	26
COCCONEIS PLACENTULA	-	-	-	-	-	-	-	-	-	-
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
COSCINODISCUS SP	20	-	-	-	25	12	14	-	-	-
CYCLOTELLA CATENATA	-	-	-	-	-	-	14	-	-	-
CYCLOTELLA SP	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	-	-	-	9	-	-	311	76	-	-
CYCLOTELLA MENEGHINIANA	-	-	16	9	-	12	-	-	-	-
CYCLOTELLA STELLIGERA	30	19	47	9	25	49	-	38	17	13
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
CYMBELLA MINUTA	-	-	-	-	-	-	-	-	-	-
CYMBELLA TUMIDA	-	-	-	-	-	-	-	-	-	13
FRAGILARIA CONSTRUENS	-	9	-	-	-	-	-	-	-	-
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA PARVULUM	-	-	-	-	-	-	-	13	-	-
GOMPHONEMA TRUNCATUM	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA SP	-	-	-	-	-	-	-	-	-	-
GYROSIGMA ACUMINATUM	-	-	-	-	-	-	-	-	-	-
MELOSIRA AMBIGUA	-	-	-	-	-	-	42	-	202	91
MELOSIRA DISTANS	1418	1251	2155	1220	1756	1399	2431	1977	1771	1242
MELOSIRA GRANULATA	10	37	47	-	-	-	-	-	-	39
MELOSIRA GRANULATA V ANGUSTISSIMA	-	-	47	-	-	-	-	-	67	-
MELOSIRA VARIANS	10	9	-	-	-	-	-	-	-	-
NAVICULA CRYPTOCEPHALA	-	-	-	-	-	-	-	13	-	-
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	-	-	-	-	-
NAVICULA PUPULA	-	-	-	-	-	-	-	-	-	-
NAVICULA SALINARUM V INTERMEDIA	-	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	-	-	-	-	-	-	-	-	13
NITZSCHIA ACICULARIS	-	-	-	17	-	-	14	-	-	13
NITZSCHIA HOLSATICA	-	-	-	-	-	12	-	13	17	-
NITZSCHIA KUTZINGIANA	-	9	-	-	-	-	-	-	-	-
NITZSCHIA PALEA	-	-	-	9	-	-	-	-	-	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SINUATA V TABELLARIA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SP	10	9	-	9	-	-	-	-	-	-
OPEPHORA MARTYI	-	-	-	-	-	-	-	-	-	-

TABLE H-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PINNULARIA BICEPS	-	-	-	-	-	-	-	-	-	-
RHIZOSOLENIA SP	-	-	-	-	-	-	-	38	-	-
SYNEDRA CAPITATA	-	-	-	-	-	-	-	-	-	-
SYNEDRA DELICATISSIMA	-	9	16	-	25	-	-	-	17	-
SYNEDRA ULNA	-	-	-	-	-	-	-	-	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	-	-	-	14	-	118	65
PHACUS SP	-	-	-	-	-	-	-	13	-	26
TRACHELOMONAS SP	-	-	-	-	-	-	-	-	67	-
PROTOZOA										
UNID CILIOPHORA	-	9	32	-	-	12	-	38	17	13
UNID RHIZOPODA	-	-	-	-	-	-	-	-	-	26
ROTIFERA										
UNID ROTIFER	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	3829	2462	4514	2597	6374	5436	8972	8340	7320	4858
NUMBER OF TAXA	26	30	24	23	18	23	27	33	41	42

TABLE H-3b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
				NUMBER OF ORGANISMS AT STATION:						
CYANOPHYTA										
ANABAENA SP	-	131	-	17	-	8	-	-	-	********
APHANIZOMENON FLOS-AQUAE	-	18	-	-	-	-	-	-	-	********
APHANOCAPSA DELICATISSIMA	1416	338	-	-	2397	-	-	654	1020	********
APHANOCAPSA ELACHISTA	-	47	2939	-	2288	24	26	1651	-	********
APHANOTHECE CLATHRATA	-	1195	-	-	1068	-	-	-	153	********
ARTHROSPIRA JENNERI	-	-	-	561	-	-	-	-	-	********
CHROOCOCCUS DISPERSUS	697	122	847	-	87	23	-	180	395	********
CHROOCOCCUS LIMNETICUS	-	352	-	17	-	-	-	-	-	********
GLOEOCAPSA RUPESTRIS	-	-	-	12	-	-	-	-	-	********
GOMPHOSPHAERIA LACUSTRIS	-	496	-	-	-	-	-	-	-	********
LYNGBYA CONTORTA	-	-	-	-	-	-	-	-	-	********
MERISMOPEDIA GLAUCA	349	406	797	-	523	-	-	-	-	********
MERISMOPEDIA TENUISSIMA	1743	577	1021	780	784	27	-	850	816	********
OSCILLATORIA LIMNETICA	-	-	100	-	131	99	17	-	344	********
OSCILLATORIA SP	-	-	1532	-	-	13	-	-	-	********
PHORMIDIUM TENUE	-	-	-	-	-	9	-	-	-	********
POLYCYSTIS AERUGINOSA	-	3156	-	-	-	-	-	-	-	********
POLYCYSTIS INCERTA	1090	-	-	-	-	-	-	817	370	********
SPIRULINA LAXA	-	-	-	4	-	-	-	-	-	********
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	17	-			-	-	********
ANKISTRODESMUS FALCATUS	87	13	162	8	109	3	P	49	89	********
ANKISTRODESMUS NANNOSELENE	-	4	75	21	44	3	-	33	13	********
ANKISTRODESMUS SPIRALIS	44	-	62	75	76	3	2	-	13	********
CARTERIA SP	-	-	-	-	-	2	P	-	-	********
CHLAMYDOMONAS SP	-	9	25	8	33	-	2	49	25	********
CHLORELLA SP	-	-	-	-	-	-	-	-	-	********
CHLOROGONIUM EUCHLORUM	22	-	-	-	-	P	-	-	-	********
CHODATELLA CHODATI	22	-	-	21	-	-	-	-	-	********

TABLE H-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
CHODATELLA SUBSALSA	44	-	-	21	-	-	-	-	-	********
CLOSTERIUM SP	-	-	-	-	-	P	-	-	-	********
COELASTRUM MICROPORUM	-	4	-	-	-	-	-	1046	-	********
COELASTRUM MORUS	-	18	-	-	-	-	-	-	-	********
COELASTRUM SPHAERICUM	872	50	187	4	76	2	7	-	510	********
COSMARIUM SP	-	-	-	-	-	-	-	-	13	********
CRUCIGENIA APICULATA	87	72	-	-	-	-	-	-	204	********
CRUCIGENIA QUADRATA	-	54	-	17	-	11	6	-	-	********
CRUCIGENIA TETRAPEDIA	370	149	199	-	-	-	-	-	51	********
DICTYOSPHAERIUM PULCHELLUM	174	-	50	-	-	-	14	-	89	********
DYSMORPHOCOCCUS VARIABILIS	-	-	12	-	-	-	P	-	-	********
EUASTRUM SP	-	-	-	-	-	-	-	-	-	********
GOLENKINIA RADIATA	44	9	87	12	76	5	P	49	25	********
GONIUM PECTORALE	-	-	187	17	142	-	-	-	13	********
KIRCHNERIELLA LUNARIS	109	-	-	33	54	3	P	98	51	********
KIRCHNERIELLA OBESA	109	-	-	37	-	4	2	147	51	********
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	305	10	-	-	293	********
OOCYSTIS SP	-	9	-	-	44	-	-	16	64	********
PANDORINA MORUM	-	-	100	-	174	8	-	-	-	********
PEDIASTRUM BIRADIATUM	109	-	-	-	-	-	-	131	51	********
PEDIASTRUM BORYANUM	-	-	-	66	-	-	-	-	-	********
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	50	-	-	-	-	-	********
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	-	-	********
PEDIASTRUM TETRAS	-	-	-	-	-	-	-	-	-	********
PEDIASTRUM TETRAS V TETRAODON	87	-	-	-	-	-	-	65	-	********
POLYEDRIOPSIS SPINULOSA	-	-	-	-	-	-	P	-	-	********
PTEROMONAS SP	-	-	-	-	-	2	-	-	-	********
RADIOCOCCUS NIMBATUS	-	-	-	100	-	-	-	-	-	********
SCENEDESMUS ABUNDANS	87	-	25	-	-	-	-	33	25	********
SCENEDESMUS ACUMINATUS	-	-	-	-	11	P	-	-	51	********
SCENEDESMUS ARMATUS	-	18	-	-	44	-	-	-	102	********
SCENEDESMUS ARMATUS V BICAUDATA	-	-	50	17	-	-	-	65	64	********
SCENEDESMUS BIJUGA	44	41	25	83	-	-	-	131	102	********
SCENEDESMUS DENTICULATUS	-	-	-	-	-	6	3	-	51	********
SCENEDESMUS QUADRICAUDA	218	-	100	100	44	-	P	310	255	********
SCENEDESMUS SP	-	63	-	-	-	-	-	33	13	********
SCHROEDERIA SETIGERA	-	-	-	-	-	-	-	16	-	********
SELANASTRUM MINUTUM	-	-	50	-	11	-	-	-	13	********
SORASTRUM SPINULOSUM	44	-	-	-	-	-	-	-	-	********
SPERMATOZOOPSIS EXULTANS	22	-	-	-	-	P	-	-	25	********
SPONDYLOSIUM PLANUM	-	-	-	-	-	-	-	-	-	********
STAURASTRUM SP	-	22	-	-	-	-	-	16	-	********
TETRAEDRON CAUDATUM	-	36	-	4	11	-	-	33	-	********
TETRAEDRON MINIMUM	22	36	-	4	11	-	-	16	25	********
TETRAEDRON MUTICUM	22	-	-	-	-	-	-	-	-	********

TABLE H-3b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
	NUMBER OF ORGANISMS AT STATION:									
TETRAEDRON REGULARE	-	-	-	-	-	-	-	-	25	********
TETRAEDRON REGULARE V INCUS	-	-	-	-	-	-	-	-	-	********
TETRAEDRON TRIGONUM	22	4	-	-	-	-	-	-	-	********
TETRASTRUM STAUROGENIFORME	65	-	149	50	44	-	-	-	51	********
TREUBARIA SETIGERUM	-	-	-	-	-	2	-	-	-	********
CRYPTOPHYTA										
CRYPTOMONAS EROSA	65	4	87	25	54	4	-	-	13	********
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	-	-	-	-	-	13	********
GLENODINIUM SP	-	18	-	-	-	3	-	16	-	********
PERIDINIUM SP	-	-	-	-	-	-	-	16	-	********
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	44	-	-	12	-	3	8	-	13	********
CENTRITRACTUS BELANOPHORUS	-	4	-	-	-	-	-	-	-	********
OPHIOCYTIUM CAPITATUM	-	-	-	-	-	8	-	-	-	********
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	22	4	-	-	-	-	-	16	-	********
DINOBRYON BAVARICUM	44	4	-	4	-	-	-	-	-	********
LAGYNION SCHERFFELII	-	-	-	-	-	-	-	16	-	********

TABLE H-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES CLEVEI	-	4	-	-	-	-	-	-	-	********
ACHNANTHES SP	-	-	-	12	-	-	-	-	-	********
ACHNANTHES LANCEOLATA V DUBIA	-	-	37	12	84	P	-	-	-	********
ASTERIONELLA FORMOSA	44	-	-	-	-	-	-	-	13	********
COCCONEIS PLACENTULA	-	-	12	4	-	-	-	-	-	********
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	11	-	-	-	-	********
COSCINODISCUS SP	-	-	25	-	22	-	-	-	-	********
CYCLOTELLA CATENATA	-	-	-	-	-	-	-	16	-	********
CYCLOTELLA SP	-	-	50	-	65	-	-	-	-	********
CYCLOTELLA GLOMERATA	-	13	336	33	752	32	2	-	-	********
CYCLOTELLA MENEGHINIANA	-	-	-	-	-	-	-	-	-	********
CYCLOTELLA STELLIGERA	22	16	87	8	84	6	P	82	81	********
CYMBELLA MICROCEPHALA	-	-	-	8	-	-	-	-	-	********
CYMBELLA MINUTA	22	-	-	-	-	-	P	-	-	********
CYMBELLA TUMIDA	-	-	-	-	-	-	P	-	-	********
FRAGILARIA CONSTRUENS	-	72	-	37	-	-	-	-	25	********
FRAGILARIA PINNATA	-	-	-	12	11	-	-	-	-	********
GOMPHONEMA PARVULUM	-	-	-	-	-	P	-	-	-	********
GOMPHONEMA TRUNCATUM	-	-	-	8	-	-	-	-	-	********
GOMPHONEMA SP	-	-	-	4	-	-	-	-	-	********
GYROSIGMA ACUMINATUM	-	-	-	-	11	-	-	-	-	********
MELOSIRA AMBIGUA	65	9	61	-	-	6	-	16	25	********
MELOSIRA DISTANS	2768	13	25	-	131	8	3	2517	1327	********
MELOSIRA GRANULATA	-	-	25	-	470	30	8	114	64	********
MELOSIRA GRANULATA V ANGUSTISSIMA	44	-	-	-	33	3	15	-	-	********
MELOSIRA VARIANS	-	-	-	-	-	3	2	-	-	********
NAVICULA CRYPTOCEPHALA	-	4	-	-	-	-	-	-	-	********
NAVICULA EXIGUA V CAPITATA	-	-	-	8	22	P	-	-	13	********
NAVICULA PUPULA	-	-	-	4	11	P	P	-	-	********
NAVICULA SALINARUM V INTERMEDIA	-	4	-	4	-	2	-	-	-	********
NAVICULA SP	-	9	-	4	-	2	P	-	-	********
NITZSCHIA ACICULARIS	-	18	-	4	-	-	-	16	-	********
NITZSCHIA HOLSATICA	-	-	-	8	87	4	3	-	-	********
NITZSCHIA KUTZINGIANA	-	-	-	-	-	-	-	-	-	********
NITZSCHIA PALEA	-	-	-	4	-	-	-	-	-	********
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	16	-	********
NITZSCHIA SINUATA V TABELLARIA	-	-	-	4	-	-	-	-	-	********
NITZSCHIA SP	-	-	25	-	-	-	-	-	-	********
OPEPHORA MARTYI	-	-	-	21	-	-	-	-	-	********

TABLE H-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
PINNULARIA BICEPS	-	-	-	-	-	-	P	-	-	********
RHIZOSOLENIA SP	44	-	-	-	-	-	-	-	-	********
SYNEDRA CAPITATA	-	-	-	4	-	-	-	-	-	********
SYNEDRA DELICATISSIMA	22	9	-	-	-	-	-	16	38	********
SYNEDRA ULNA	-	-	12	-	-	P	4	-	-	********
EUGLENOPHYTA										
EUGLENA SP	44	-	12	-	11	P	-	-	-	********
PHACUS SP	22	-	-	-	-	-	-	-	-	********
TRACHELOMONAS SP	22	-	-	-	-	P	-	16	-	********
PROTOZOA										
UNID CILIOPHORA	22	32	124	4	22	8	P	65	13	********
UNID RHIZOPODA	-	-	-	-	-	-	-	-	-	********
ROTIFERA										
UNID ROTIFER	-	-	-	-	11	P	-	-	-	********
TOTAL NUMBER OF ORGANISMS	11337	7988	9700	2424	10428	407	138	9426	7063	******
NUMBER OF TAXA	44	46	37	52	43	49	32	38	47	******

TABLE H-4a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	7	8	9	10	11	12
CYANOPHYTA										
ANABAENA SP	-	-	-	238	-	-	-	-	-	23
ANABAENOPSIS SP	44	915	77	-	-	-	-	-	-	-
APHANIZOMENON FLOS-AQUAE	-	-	-	-	-	-	-	182	-	-
APHANOCAPSA DELICATISSIMA	-	872	-	-	320	-	1350	910	1443	-
APHANOCAPSA ELACHISTA	1743	872	-	357	213	1700	844	910	-	97
APHANOTHECE CLATHRATA	-	-	-	-	-	-	-	-	-	-
APHANOTHECE NIDULANS	-	-	-	-	-	-	675	-	721	-
CHROOCOCCUS DISPERSUS	320	145	155	380	-	-	810	91	-	-
CHROOCOCCUS LIMNETICUS	-	-	-	-	64	65	-	-	54	16
GOMPHOSPHAERIA LACUSTRIS	-	-	-	-	-	-	-	-	-	-
LYNGBYA CONTORTA	-	-	-	-	-	-	-	-	-	-
MERISMOPEDIA GLAUCA	-	-	-	761	-	-	-	-	-	26
MERISMOPEDIA TENUISSIMA	1046	2092	16039	5087	2540	16213	9144	8550	5410	103
OSCILLATORIA LIMNETICA	567	523	755	273	-	229	236	1023	-	-
OSCILLATORIA SP	-	174	-	285	-	98	439	-	-	129
PHORMIDIUM TENUE	-	-	-	-	-	-	202	-	-	-
POLYCYSTIS INCERTA	291	581	581	1189	-	-	2025	1137	361	65
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	-	-	-	-	144	-
ANKISTRODESMUS FALCATUS	44	29	136	24	11	33	67	-	72	6
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	-	23	-	-
ANKISTRODESMUS SPIRALIS	-	14	-	24	-	-	-	-	54	-
CARTERIA SP	-	-	-	-	32	-	-	-	-	-
CHARACIUM AMBIGUUM	-	-	-	-	-	-	-	-	-	-

TABLE H-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	6	7	8	9	10	11	12
CHLAMYDOMONAS SP	14	14	-	12	85	65	34	-	-	10
CHLORELLA SP	-	-	-	-	-	-	17	-	-	-
CHLOROGONIUM ELONGATUM	-	-	-	-	-	-	-	-	-	6
CHLOROGONIUM EUCHLORUM	-	-	-	-	-	-	-	-	-	-
CHODATELLA CHODATI	-	-	-	-	-	-	-	-	-	-
CHODATELLA WRATISLAWIENSIS	-	-	-	-	-	-	-	-	-	-
CLOSTERIUM SP	-	-	19	-	-	-	-	-	-	3
COELASTRUM CAMBRICUM	-	-	-	-	-	-	-	-	-	-
COELASTRUM MICROPORUM	-	465	-	-	342	16	-	-	-	-
COELASTRUM PROBOSCIDEUM	-	-	-	-	85	-	-	-	-	-
COELASTRUM SPHAERICUM	102	73	-	119	768	261	540	23	36	-
COSMARIUM TRILOBULATUM	29	-	-	-	-	-	-	-	-	6
COSMARIUM SP	-	-	-	-	-	-	-	23	-	10
CRUCIGENIA APICULATA	232	145	-	-	-	-	-	-	-	77
CRUCIGENIA TETRAPEDIA	-	-	-	-	-	-	-	-	-	90
DICTYOSPHAERIUM EHRENBERGIANUM	-	-	-	238	-	-	-	-	-	-
DICTYOSPHAERIUM PULCHELLUM	-	174	116	47	683	-	-	182	649	-
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	16	17	91	-	-
ELAKATOTHRIX GELATINOSA	-	-	-	-	-	-	-	-	-	-
EUASTRUM SP	-	-	-	-	-	-	-	-	-	-
GOLENKINIA RADIATA	14	14	77	-	11	16	34	45	54	16
GONIUM PECTORALE	-	14	-	-	-	82	-	-	-	-
KIRCHNERIELLA LUNARIS	58	14	19	-	-	16	84	23	-	3
KIRCHNERIELLA OBESA	44	-	19	-	11	-	101	114	-	-
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	-	-	-	-	-	-
OOCYSTIS SP	29	58	-	36	128	65	84	-	-	55
PANDORINA MORUM	-	-	310	-	-	33	-	-	144	-
PEDIASTRUM BIRADIATUM	-	58	-	-	-	-	-	-	-	-
PEDIASTRUM DUPLEX V CLATHRATUM	-	116	-	-	-	131	-	364	144	-
PEDIASTRUM SIMPLEX V DUODENARIUM	-	-	-	-	-	-	-	-	-	103
PEDIASTRUM TETRAS V TETRAODON	-	-	-	-	-	-	-	-	-	6
PTEROMONAS SP	-	-	-	-	32	33	-	45	-	-
RADIOCOCCUS NIMBATUS	-	-	-	-	-	-	-	-	-	-
RHIZOCLONIUM SP	-	-	-	-	-	-	34	-	-	-
SCENEDESMUS ABUNDANS	-	-	77	24	-	-	-	45	108	-
SCENEDESMUS ACUMINATUS	-	-	-	24	43	-	-	-	-	-
SCENEDESMUS ARMATUS	58	87	77	95	43	-	67	296	108	13
SCENEDESMUS ARMATUS V BICAUDATA	116	58	155	95	-	131	34	182	-	-
SCENEDESMUS BIJUGA	-	87	-	-	-	65	67	91	-	-
SCENEDESMUS DENTICULATUS	-	-	155	-	-	-	-	-	-	-
SCENEDESMUS QUADRICAUDA	58	116	252	143	75	245	202	182	162	45
SCENEDESMUS SP	58	58	39	-	-	-	-	136	72	52

TABLE H-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	6	7	8	9	10	11	12
SCHROEDERIA SETIGERA	58	131	77	12	21	16	17	-	-	-
SELENASTRUM MINUTUM	-	-	39	-	-	-	-	-	-	-
SORASTRUM SPINULOSUM	-	-	-	-	21	-	-	-	36	-
SPERMATOZOOPSIS EXULTANS	-	-	-	-	-	-	-	-	-	-
SPONDYLOSIUM PLANUM	14	29	-	-	-	16	-	-	-	10
STAURASTRUM SP	29	29	39	-	-	-	-	45	18	23
TETRAEDRON CAUDATUM	-	-	-	-	-	-	-	-	-	55
TETRAEDRON MINIMUM	-	-	-	-	11	-	-	23	-	13
TETRAEDRON MUTICUM	-	-	-	-	-	-	-	-	18	-
TETRAEDRON REGULARE	-	-	-	-	11	-	-	-	-	3
TETRAEDRON TRIGONUM	-	-	-	-	-	-	-	-	-	10
TETRASTRUM STAUROGENIFORME	-	-	-	-	-	-	67	-	-	-
TREUBARIA SETIGERUM	-	-	-	12	11	33	-	-	18	-
UNID CHLOROPHYTA	-	-	-	-	-	-	-	-	36	-
CRYPTOPHYTA										
CRYPTOMONAS EROSA	14	14	232	83	43	490	17	23	-	42
RHODOMONAS SP	-	-	-	12	-	-	-	-	-	13
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	12	-	-	-	-	-	-
GLENODINIUM SP	-	-	-	-	11	-	-	23	-	6
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	-	-	-	-	16	17	45	36	-
OPHIOCYTIUM CAPITATUM	-	-	-	-	-	-	-	-	-	-

TABLE H-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	7	8	9	10	11	12
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	-	-	-	-	-	17	45	-	-
DINOBRYON BAVARICUM	-	-	19	-	-	-	-	-	-	-
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	-	-	3
DINOBRYON SERTULARIA	-	-	-	-	-	-	-	-	18	-
LAGYNION SCHERFFELII	-	14	-	-	-	-	-	68	-	-
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	-	-	-	-	-	-	-	-	18	10
ACHNANTHES SP	-	-	-	-	-	-	-	-	-	3
ASTERIONELLA FORMOSA	-	14	-	-	-	-	-	-	-	-
COCCONEIS PLACENTULA	-	-	-	-	-	-	-	-	-	3
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
COSCINODISCUS SP	-	-	-	24	-	-	34	-	-	-
CYCLOTELLA CATENATA	-	-	-	-	-	-	-	-	18	-
CYCLOTELLA GLOMERATA	-	29	-	-	-	98	-	182	613	6
CYCLOTELLA STELLIGERA	58	131	97	190	64	278	84	136	162	3
CYCLOTELLA SP	-	-	-	-	-	-	-	-	-	-
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	26
FRAGILARIA CONSTRUENS	-	-	-	-	-	-	17	-	-	-
FRAGILARIA CROTONENSIS	3341	2179	1201	2235	1313	458	523	1137	54	3
GOMPHONEMA PAPVULUM	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA TRUNCATUM	-	-	-	-	-	-	-	-	-	-
MELOSIRA AMBIGUA	102	87	368	59	681	-	152	136	289	29
MELOSIRA DISTANS	479	334	1569	773	1046	1209	810	2160	1064	10
MELOSIRA GRANULATA	131	73	329	107	395	327	337	705	649	-
MELOSIRA GRANULATA V ANGUSTISSIMA	-	291	174	36	107	-	51	227	-	-
MELOSIRA VARIANS	-	-	-	-	-	-	-	-	-	-
NAVICULA CRYPTOCEPHALA	-	-	-	-	-	-	-	-	-	-
NAVICULA EXIGUA V CAPITATA	-	-	-	12	-	-	-	-	-	3
NAVICULA GASTRUM	-	14	-	-	-	-	-	-	-	-
NAVICULA PUPULA	-	-	-	-	-	-	-	23	-	6
NAVICULA PUPULA V RECTANGULARIS	-	-	-	-	-	-	-	-	-	6
NAVICULA SALINARUM V INTERMEDIA	-	-	-	-	-	16	-	-	-	-
NAVICULA SP	-	-	-	-	-	-	-	-	-	-

TABLE H-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	6	7	8	9	10	11	12
NITZSCHIA ACICULARIS	-	-	-	-	-	-	17	-	-	-
NITZSCHIA HOLSATICA	-	-	-	-	-	16	17	23	-	26
NITZSCHIA KUTZINGIANA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA PALEA	-	-	-	-	-	16	-	-	-	3
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA TRYBLIONELLA V LEVIDENSIS	-	-	-	-	-	-	-	-	-	-
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	-	-	-	-	-	-	-	18	-
NITZSCHIA SP	-	-	-	-	-	-	34	-	18	-
OPEPHORA MARTYI	-	-	-	-	-	-	-	-	-	-
RHIZOSOLENIA SP	44	73	19	24	85	-	-	-	18	-
SURIRELLA SP	-	-	-	-	-	-	-	-	-	-
SYNEDRA DELICATISSIMA	14	44	39	12	-	-	-	-	18	3
SYNEDRA DELICATISSIMA V ANGUSTISSIMA	58	44	-	-	21	-	34	68	36	-
SYNEDRA ULNA	-	29	-	-	-	-	-	-	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	12	11	-	-	23	36	3
PHACUS SP	-	-	-	-	-	-	-	23	-	-
TRACHELOMONAS SP	-	-	-	-	-	16	-	-	18	-
PROTOZOA										
PARAMECIUM SP	-	-	-	-	-	-	17	-	-	-
UNID CILIOPHORA	29	14	155	12	21	98	118	159	72	23
UNID CLADOCERA	-	-	-	-	-	-	-	-	-	3
TOTAL NUMBER OF ORGANISMS	9238	11341	23418	13078	9329	22616	19487	19942	13017	1307
NUMBER OF TAXA	32	45	32	37	35	35	42	43	40	51

TABLE H-4b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	15	16	17	18	19	******	******	******
CYANOPHYTA										
ANABAENA SP	-	-	-	-	-	436	-	********	********	********
ANABAENOPSIS SP	-	335	-	-	-	-	-	********	********	********
APHANIZOMENON FLOS-AQUAE	-	-	-	-	-	-	-	********	********	********
APHANOCAPSA DELICATISSIMA	6538	-	-	-	-	-	-	********	********	********
APHANOCAPSA ELACHISTA	1961	102	-	493	132	1743	121	********	********	********
APHANOTHECE CLATHRATA	-	-	-	-	-	4358	-	********	********	********
APHANOTHECE NIDULANS	-	-	1121	-	-	-	-	********	********	********
CHROOCOCCUS DISPERSUS	3923	-	747	197	33	349	451	********	********	********
CHROOCOCCUS LIMNETICUS	392	-	-	-	-	-	-	********	********	********
GOMPHOSPHAERIA LACUSTRIS	-	-	2391	-	-	-	-	********	********	********
LYNGBYA CONTORTA	-	-	299	-	-	-	-	********	********	********
MERISMOPEDIA GLAUCA	1046	-	-	-	-	-	-	********	********	********
MERISMOPEDIA TENUISSIMA	27197	728	1195	-	-	3748	1094	********	********	********
OSCILLATORIA LIMNETICA	-	-	-	-	-	305	80	********	********	********
OSCILLATORIA SP	1307	-	-	94	8	370	145	********	********	********
PHORMIDIUM TENUE	-	-	-	-	-	-	-	********	********	********
POLYCYSTIS INCERTA	1307	-	-	-	-	-	241	********	********	********
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	261	-	-	-	-	-	64	********	********	********
ANKISTRODESMUS FALCATUS	-	62	-	5	-	44	8	********	********	********
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	32	********	********	********
ANKISTRODESMUS SPIRALIS	196	28	75	5	2	44	16	********	********	********
CARTERIA SP	-	17	112	-	-	-	-	********	********	********
CHARACIUM AMBIGUUM	-	6	-	-	-	-	-	********	********	********

TABLE H-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	15	16	17	18	19	******	******	******
CHLAMYDOMONAS SP	65	45	-	39	-	22	8	********	********	********
CHLORELLA SP	-	51	-	-	-	-	-	********	********	********
CHLOROGONIUM ELONGATUM	-	6	-	-	-	-	-	********	********	********
CHLOROGONIUM EUCHLORUM	-	6	-	-	-	-	-	********	********	********
CHODATELLA CHODATI	-	6	-	-	-	-	-	********	********	********
CHODATELLA WRATISLAWIENSIS	-	6	-	-	-	-	-	********	********	********
CLOSTERIUM SP	-	-	-	-	-	-	-	********	********	********
COELASTRUM CAMBRICUM	-	-	-	-	79	370	-	********	********	********
COELASTRUM MICROPORUM	-	-	-	-	-	-	-	********	********	********
COELASTRUM PROBOSCIDEUM	-	-	-	-	-	-	-	********	********	********
COELASTRUM SPHAERICUM	-	11	-	-	15	-	16	********	********	********
COSMARIUM TRILOBULATUM	-	-	-	-	-	-	-	********	********	********
COSMARIUM SP	-	11	-	-	-	-	-	********	********	********
CRUCIGENIA APICULATA	-	-	-	-	-	-	32	********	********	********
CRUCIGENIA TETRAPEDIA	-	-	-	-	-	-	-	********	********	********
DICTYOSPHAERIUM EHRENBERGIANUM	-	-	-	-	-	-	-	********	********	********
DICTYOSPHAERIUM PULCHELLUM	-	-	299	39	13	-	64	********	********	********
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	********	********	********
ELAKATOTHRIX GELATINOSA	131	-	-	-	-	-	-	********	********	********
EUASTRUM SP	-	-	-	-	-	-	8	********	********	********
GOLENKINIA RADIATA	327	6	75	34	3	109	8	********	********	********
GONIUM PECTORALE	2419	45	112	5	5	22	8	********	********	********
KIRCHNERIELLA LUNARIS	-	23	-	15	2	-	24	********	********	********
KIRCHNERIELLA OBESA	-	11	-	25	10	87	-	********	********	********
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	-	87	-	********	********	********
OOCYSTIS SP	-	34	-	5	-	174	-	********	********	********
PANDORINA MORUM	-	91	299	150	-	349	-	********	********	********
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	********	********	********
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	-	********	********	********
PEDIASTRUM SIMPLEX V DUODENARIUM	-	-	-	-	-	-	-	********	********	********
PEDIASTRUM TETRAS V TETRAODON	-	-	-	-	-	-	-	********	********	********
PTEROMONAS SP	-	-	-	-	-	-	8	********	********	********
RADIOCOCCUS NIMBATUS	-	182	-	-	-	-	-	********	********	********
RHIZOCLONIUM SP	-	-	-	-	-	-	-	********	********	********
SCENEDESMUS ABUNDANS	-	-	-	-	-	-	48	********	********	********
SCENEDESMUS ACUMINATUS	-	-	149	-	-	-	-	********	********	********
SCENEDESMUS ARMATUS	-	-	-	10	-	87	-	********	********	********
SCENEDESMUS ARMATUS V BICAUDATA	-	11	-	-	-	87	64	********	********	********
SCENEDESMUS BIJUGA	-	45	149	30	7	-	32	********	********	********
SCENEDESMUS DENTICULATUS	-	-	-	-	15	-	32	********	********	********
SCENEDESMUS QUADRICAUDA	915	45	75	10	-	196	88	********	********	********
SCENEDESMUS SP	261	11	75	49	26	349	64	********	********	********
SCHROEDERIA SETIGERA	196	-	37	-	-	22	8	********	********	********
SELENASTRUM MINUTUM	-	-	-	-	-	-	-	********	********	********
SORASTRUM SPINULOSUM	-	-	-	-	-	-	-	********	********	********

TABLE H-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	15	16	17	18	19	******	******	******
SPERMATOZOOPSIS EXULTANS	65	-	-	10	-	22	-	*******	*******	*******
SPONDYLOSIUM PLANUM	-	-	-	10	3	-	16	*******	*******	*******
STAURASTRUM SP	-	11	-	5	-	-	8	*******	*******	*******
TETRAEDRON CAUDATUM	-	-	37	-	-	-	8	*******	*******	*******
TETRAEDRON MINIMUM	-	17	-	-	-	-	8	*******	*******	*******
TETRAEDRON MUTICUM	-	-	-	-	-	-	-	*******	*******	*******
TETRAEDRON REGULARE	-	-	-	-	-	-	-	*******	*******	*******
TETRAEDRON TRIGONUM	65	-	-	-	-	-	-	*******	*******	*******
TETRASTRUM STAUROGENIFORME	-	23	-	-	-	-	-	*******	*******	*******
TREUBARIA SETIGERUM	-	-	37	-	-	22	-	*******	*******	*******
UNID CHLOROPHYTA	65	-	75	5	-	65	-	*******	*******	*******
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	68	149	-	2	-	8	*******	*******	*******
RHODOMONAS SP	-	-	-	-	-	-	24	*******	*******	*******
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	-	-	-	-	*******	*******	*******
GLENODINIUM SP	65	-	-	-	2	22	-	*******	*******	*******
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	11	-	39	2	-	-	*******	*******	*******
OPHIOCYTIUM CAPITATUM	-	-	-	5	5	-	-	*******	*******	*******

TABLE H-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	15	16	17	18	19	******	******	******
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	-	-	-	2	-	8	********	********	********
DINOBRYON BAVARICUM	-	-	-	-	-	-	-	********	********	********
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	********	********	********
DINOBRYON SERTULARIA	-	-	-	-	-	-	-	********	********	********
LAGYNION SCHERFFELII	-	-	-	-	-	-	-	********	********	********
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	65	-	-	-	2	-	-	********	********	********
ACHNANTHES SP	-	-	-	-	2	-	-	********	********	********
ASTERIONELLA FORMOSA	-	-	-	-	-	-	-	********	********	********
COCCONEIS PLACENTULA	-	-	-	-	-	-	-	********	********	********
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	10	3	-	-	********	********	********
COSCINODISCUS SP	-	-	-	-	-	-	8	********	********	********
CYCLOTELLA CATENATA	-	-	-	-	-	-	-	********	********	********
CYCLOTELLA GLOMERATA	10722	6	6650	572	122	1525	620	********	********	********
CYCLOTELLA STELLIGERA	327	74	75	20	2	152	16	********	********	********
CYCLOTELLA SP	-	-	-	10	-	65	-	********	********	********
CYMBELLA MICROCEPHALA	-	28	-	5	-	-	-	********	********	********
FRAGILARIA CONSTRUENS	-	6	-	-	-	-	-	********	********	********
FRAGILARIA CROTONENSIS	-	6	-	-	-	22	8	********	********	********
GOMPHONEMA PARVULUM	-	6	-	5	-	-	-	********	********	********
GOMPHONEMA TRUNCATUM	-	6	-	-	-	-	-	********	********	********
MELOSIRA AMBIGUA	-	-	112	-	-	-	56	********	********	********
MELOSIRA DISTANS	-	6	112	34	12	763	249	********	********	********
MELOSIRA GRANULATA	458	-	37	-	-	458	113	********	********	********
MELOSIRA GRANULATA V ANGUSTISSIMA	-	-	-	-	-	-	-	********	********	********
MELOSIRA VARIANS	-	-	-	-	8	-	-	********	********	********
NAVICULA CRYPTOCEPHALA	-	-	-	5	2	-	-	********	********	********
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	-	-	********	********	********
NAVICULA GASTRUM	-	-	-	-	-	-	-	********	********	********
NAVICULA PUPULA	-	6	-	-	2	22	-	********	********	********
NAVICULA PUPULA V RECTANGULARIS	-	-	-	-	-	-	-	********	********	********
NAVICULA SALINARUM V INTERMEDIA	-	-	-	-	-	-	-	********	********	********
NAVICULA SP	-	6	-	5	2	-	-	********	********	********

TABLE H-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	15	16	17	18	19	******	******	******
NITZSCHIA ACICULARIS	65	-	-	5	-	-	8	*******	*******	*******
NITZSCHIA HOLSATICA	131	-	-	5	-	44	-	*******	*******	*******
NITZSCHIA KUTZINGIANA	-	6	-	5	3	-	-	*******	*******	*******
NITZSCHIA PALEA	-	-	-	5	2	-	-	*******	*******	*******
NITZSCHIA PALFACEA	-	-	-	5	-	-	-	*******	*******	*******
NITZSCHIA TRYBLICNELLA V LEVIDENSIS	-	-	-	-	2	-	-	*******	*******	*******
NITZSCHIA TRYBLICNELLA V VICTORIAE	-	-	-	5	-	-	-	*******	*******	*******
NITZSCHIA SP	-	-	-	5	-	22	-	*******	*******	*******
OPEPHORA MARTYI	-	6	-	-	-	-	8	*******	*******	*******
RHIZOSOLENIA SP	-	-	-	-	-	22	-	*******	*******	*******
SURIRELLA SP	-	-	-	5	-	-	-	*******	*******	*******
SYNEDRA DELICATISSIMA	-	-	-	-	-	-	-	*******	*******	*******
SYNEDRA DELICATISSIMA V ANGUSTISSIMA	-	-	-	-	-	-	-	*******	*******	*******
SYNEDRA ULNA	-	-	112	-	2	-	-	*******	*******	*******
EUGLENOPHYTA										
EUGLENA SP	-	11	-	5	2	-	-	*******	*******	*******
PHACUS SP	-	-	-	-	-	22	-	*******	*******	*******
TRACHELOMONAS SP	-	6	-	5	2	-	8	*******	*******	*******
PROTOZOA										
PARAMECIUM SP	-	-	-	-	-	-	-	*******	*******	*******
UNID CILIOPHORA	-	17	-	10	-	152	24	*******	*******	*******
UNID CLADOCERA	-	-	-	-	-	-	-	*******	*******	*******
TOTAL NUMBER OF ORGANISMS	60470	2250	14606	2013	536	16758	3962	******	******	******
NUMBER OF TAXA	27	46	26	43	36	38	44	******	******	******

TABLE H-5a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
ANABAENA SP	249	1195	-	560	116	-	-	-	1450	299
ANABAENOPSIS SP	772	1121	1954	2989	504	784	82	436	927	433
APHANIZOMENON FLOS-AQUAE	9290	16064	17617	21219	5579	7397	3857	1493	1961	1793
APHANOCAPSA DELICATISSIMA	-	-	-	-	-	-	-	-	-	-
APHANOCAPSA ELACHISTA	-	1494	-	-	1162	934	-	-	-	1046
CHROOCOCCUS DISPERSUS	398	-	275	299	116	1046	261	196	475	-
CHROOCOCCUS LIMNETICUS	50	-	-	-	-	-	-	-	-	-
GLOEOCAPSA RUPESTRIS	-	-	-	-	-	-	-	-	-	-
GOMPHOSPHAERIA WICHURAE	-	-	-	-	-	-	-	-	-	4304
LYNGBYA CONTORTA	-	1295	1376	560	-	784	654	-	-	-
LYNGBYA SP	-	249	-	-	-	-	-	-	-	-
MERISMOPEDIA GLAUCA	-	-	-	-	-	-	-	-	-	-
MERISMOPEDIA TENUISSIMA	-	-	881	-	-	149	6538	872	2282	4901
OSCILLATORIA LIMNETICA	249	438	413	-	542	299	-	218	-	224
OSCILLATORIA SP	-	-	275	560	-	-	-	-	166	-
POLYCYSTIS INCERTA	3113	2241	4404	2241	1162	747	1634	3081	1426	2391
SPIRULINA LAXA	-	-	-	-	-	-	-	-	-	-
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	155	-	-	87	95	98
ANKISTRODESMUS FALCATUS	-	50	27	37	39	93	65	54	59	119
ANKISTRODESMUS NANNOSELENE	-	-	-	37	-	-	-	-	-	-
ANKISTRODESMUS SPIRALIS	-	-	-	-	19	-	33	-	-	134
CHLAMYDOMONAS SP	-	25	-	-	-	-	16	11	-	105
CHODATELLA CHODATI	-	25	-	-	-	-	-	-	-	-
CHODATELLA SUBSALSA	-	-	-	37	-	-	65	-	-	-
CHODATELLA WRATISLAWIENSIS	-	-	-	-	-	-	-	-	-	15
CLOSTERIUM SP	-	-	-	-	-	-	-	-	-	-

TABLE H-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
COELASTRUM CAMBRICUM	-	-	-	-	-	-	-	-	-	-
COELASTRUM MICROPORUM	-	-	-	-	-	-	65	87	-	-
COELASTRUM MORUS	-	-	-	-	-	-	-	-	-	-
COELASTRUM SPHAERICUM	-	-	-	-	97	-	65	-	95	239
COSMARIUM TRILOBULATUM	-	-	-	-	-	19	-	-	-	-
COSMARIUM SP	-	25	55	37	39	19	16	11	-	-
CRUCIGENIA APICULATA	398	-	-	-	310	-	65	174	380	60
CRUCIGENIA QUADRATA	-	-	-	-	-	-	-	-	-	-
DICTYOSPHAERIUM PULCHELLUM	-	-	-	-	-	-	131	-	190	-
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	-	-	-
ELAKATOTHRIX GELATINOSA	-	-	55	-	39	-	16	-	36	-
EUASTRUM SP	-	-	-	-	-	19	33	11	24	-
GOLENKINIA RADIATA	-	-	-	-	19	19	16	33	71	60
GONIUM PECTORALE	-	-	-	-	-	-	-	229	226	-
KIRCHNERIELLA LUNARIS	-	-	110	-	-	-	65	11	71	134
KIRCHNERIELLA OBESA	-	-	27	-	-	93	-	-	-	15
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	-	-	-	44	-	-
OOCYSTIS SP	25	25	220	112	-	168	147	87	-	45
PANDORINA MORUM	-	-	-	-	-	-	-	-	-	15
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	-	-	239
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	-	87	-	239
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	-	95	-
PEDIASTRUM TETRAS V TETRAODON	-	-	-	-	-	-	-	-	95	-
PEDIASTRUM SP	-	-	-	-	-	-	-	-	-	-
SCENEDESMUS ABUNDANS	-	-	-	-	-	-	-	65	-	-
SCENEDESMUS ACUMINATUS	-	-	110	-	-	-	65	-	-	-
SCENEDESMUS ARMATUS	299	-	-	149	-	-	65	174	-	119
SCENEDESMUS ARMATUS V BICAUDATA	-	-	-	75	-	37	-	-	47	90
SCENEDESMUS BIJUGA	-	100	-	149	-	37	65	-	-	-
SCENEDESMUS DENTICULATUS	-	-	55	-	-	-	-	-	95	-
SCENEDESMUS QUADRICAUDA	100	-	55	75	77	112	327	120	83	75
SCENEDESMUS SP	50	-	-	149	39	-	-	-	95	30
SCHROEDERIA SETIGERA	-	-	-	-	-	-	-	-	-	-
SELENASTRUM MINUTUM	-	-	27	-	-	19	-	-	-	30
SPERMATOZOOPSIS EXULTANS	-	-	-	-	-	-	-	11	-	-
SPHAEROCYSTIS SCHROETERI	-	-	-	-	-	-	-	-	-	-
SPHAEROZOSMA GRANULATUM	-	-	-	-	-	-	-	-	-	-
SPONDYLOSIUM PLANUM	-	124	-	75	-	-	16	-	36	-
STAURASTRUM SP	224	75	83	37	58	112	65	54	24	45

TABLE H-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	1	2	3	4	5	6	7	8	9	10
TETRAEDRON CAUDATUM	-	25	-	-	-	-	-	-	-	-
TETRAEDRON GRACILE	-	-	-	-	-	-	-	-	24	-
TETRAEDRON MINIMUM	25	-	-	-	39	-	-	-	12	-
TETRAEDRON REGULARE	-	-	-	-	-	-	-	-	-	15
TETRAEDRON TRIGONUM	-	-	-	-	39	-	-	11	12	-
TETRAEDRON TRIGONIUM V SETIGERIUM	-	-	-	-	-	-	-	-	-	-
TREUBARIA SETIGERUM	-	-	-	-	-	-	-	-	-	-
UNID CHLOROPHYTA	-	-	-	-	-	-	-	-	-	-
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	27	-	-	-	33	-	36	75
RHODOMONAS SP	-	-	-	-	-	-	-	11	-	30
PYRRHOPHYTA										
GLENODINIUM SP	-	-	-	75	-	19	-	-	12	30
PERIDINIUM SP	-	-	-	-	-	-	16	-	-	-
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	-	-	-	-	-	-	-	-	-

TABLE H-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
OPHIOCYTIUM CAPITATUM V LONGISPINUM	-	-	-	-	-	-	-	-	-	-
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	-	-	-	-	-	-	-	24	-
LAGYNION SCHERFFELII	75	-	-	-	-	-	49	54	59	30
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	-	-	-	-	-	-	-	-	-	-
ACHNANTHES SP	-	-	-	-	-	-	-	-	-	-
CAPARTOGRAMMA CRUCICULA	-	-	-	-	-	-	-	-	-	-
COSCINODISCUS SP	-	-	-	-	19	-	16	11	-	-
CYCLOTELLA GLOMERATA	-	-	27	-	-	-	-	44	24	60
CYCLOTELLA STELLIGERA	50	50	27	37	-	19	65	44	36	45
CYCLOTELLA SP	-	-	-	-	-	-	-	-	-	-
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
EUNOTIA SP	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CROTONENSIS	75	75	83	149	426	448	1700	577	261	284
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
MELOSIRA AMBIGUA	-	-	-	-	58	37	468	54	-	164
MELOSIRA DISTANS	100	50	27	-	39	75	114	142	367	289
MELOSIRA GRANULATA	174	149	55	112	310	205	1111	632	523	583
MELOSIRA GRANULATA V ANGUSTISSIMA	-	-	-	-	-	-	-	142	-	-
NAVICULA CAPITATA V HUNGARICA	-	-	-	-	-	-	-	-	-	-
NAVICULA GASTRUM	-	-	-	-	-	-	-	-	-	-
NAVICULA LATEROPUNCTATA	-	-	-	-	-	-	16	-	-	-
NAVICULA PUPULA	-	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	-	-	37	-	-	-	-	-	-
NITZSCHIA ACICULARIS	25	-	-	37	-	-	-	22	-	-

TABLE H-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
NITZSCHIA HOLSATICA	-	-	-	-	-	-	-	-	47	-
NITZSCHIA KUTZINGIANA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SP	-	-	-	-	-	-	-	-	-	-
PINNULARIA BICEPS	-	-	-	-	-	19	-	-	-	-
RHIZOSOLENIA SP	-	-	-	-	19	-	16	22	-	-
SYNEDRA DELICATISSIMA	50	25	27	-	19	75	-	22	-	-
SYNEDRA DELICATISSIMA V ANGUSTISSIMA	-	-	-	-	-	-	-	-	-	-
SYNEDRA GOULARDI	-	-	-	-	-	-	-	-	-	-
SYNEDRA RUMPENS V FAMILARIS	1943	1220	1376	1943	1646	953	441	185	47	119
SYNEDRA ULNA	-	-	-	-	-	-	-	-	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	-	-	-	16	-	24	60
PHACUS SP	-	-	-	-	-	-	-	-	12	-
TRACHELOMONAS SP	-	-	55	-	-	-	-	-	-	15
PROTOZOA										
UNID CILIOPHORA	-	-	27	75	19	-	49	-	24	134
TOTAL NUMBER OF ORGANISMS	17734	26200	29750	31062	12705	14737	18527	9589	12038	19202
NUMBER OF TAXA	22	23	29	27	29	29	40	39	42	43

TABLE H-5b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
CYANOPHYTA										
ANABAENA SP	-	45	-	-	-	-	-	-	********	********
ANABAENOPSIS SP	-	-	235	-	-	-	-	-	********	********
APHANIZOMENON FLOS-AQUAE	2140	-	-	-	-	-	485	-	********	********
APHANOCAPSA DELICATISSIMA	1902	-	-	-	-	-	510	-	********	********
APHANOCAPSA ELACHISTA	2219	144	-	-	-	-	-	860	********	********
CHROOCOCCUS DISPERSUS	-	32	1307	-	453	138	-	41	********	********
CHROOCOCCUS LIMNETICUS	-	-	-	-	-	-	-	-	********	********
GLOEOCAPSA RUPESTRIS	190	-	-	-	-	-	-	-	********	********
GOMPHOSPHAERIA WICHURAE	-	-	-	-	-	-	-	-	********	********
LYNGBYA CONTORTA	-	-	-	-	-	-	-	193	********	********
LYNGBYA SP	-	-	-	-	-	-	-	-	********	********
MERISMOPEDIA GLAUCA	-	-	-	837	-	-	-	-	********	********
MERISMOPEDIA TENUISSIMA	4247	46	10826	5439	139	123	1658	1652	********	********
OSCILLATORIA LIMNETICA	-	3	1569	523	44	-	1148	138	********	********
OSCILLATORIA SP	634	45	-	-	-	-	-	-	********	********
POLYCYSTIS INCERTA	3645	-	-	-	-	-	765	2959	********	********
SPIRULINA LAXA	-	-	209	-	-	-	-	-	********	********
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	314	209	-	-	-	-	********	********
ANKISTRODESMUS FALCATUS	111	1	-	26	-	-	89	76	********	********
ANKISTRODESMUS NANNOSELENE	-	-	52	-	9	-	-	7	********	********
ANKISTRODESMUS SPIRALIS	349	1	131	157	-	15	191	7	********	********
CHLAMYDOMONAS SP	47	-	-	-	17	-	-	-	********	********
CHODATELLA CHODATI	-	-	-	-	-	-	-	-	********	********
CHODATELLA SUBSALSA	-	-	-	-	-	-	-	7	********	********
CHODATELLA WRATISLAWIENSIS	-	-	-	-	-	-	13	-	********	********
CLOSTERIUM SP	-	3	-	-	-	-	13	-	********	********

TABLE H-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
COELASTRUM CAMBRICUM	-	92	-	-	-	-	-	-	********	********
COELASTRUM MICROPORUM	-	6	-	-	-	-	102	-	********	********
COELASTRUM MORUS	-	-	1255	418	-	-	-	-	********	********
COELASTRUM SPHAERICUM	-	-	-	-	-	-	204	27	********	********
COSMARIUM TRILOBULATUM	-	-	-	-	-	-	-	-	********	********
COSMARIUM SP	-	10	-	-	-	-	-	27	********	********
CRUCIGENIA APICULATA	380	-	-	-	-	-	51	165	********	********
CRUCIGENIA QUADRATA	-	6	-	-	35	-	-	-	********	********
DICTYOSPHAERIUM PULCHELLUM	507	105	628	-	-	-	153	-	********	********
DYSMORPHOCOCCUS VARIABILIS	-	-	-	26	-	-	-	-	********	********
ELAKATOTHRIX GELATINOSA	-	-	26	-	-	-	25	27	********	********
EUASTRUM SP	32	-	-	-	-	-	-	-	********	********
GOLENKINIA RADIATA	47	1	235	-	70	61	51	27	********	********
GONIUM PECTORALE	63	16	26	26	17	-	-	-	********	********
KIRCHNERIELLA LUNARIS	95	-	131	-	-	-	230	-	********	********
KIRCHNERIELLA OBESA	-	-	-	26	-	-	-	27	********	********
MICRACTINIUM PUSILLUM V ELEGANS	63	-	157	-	-	-	-	-	********	********
OOCYSTIS SP	32	4	-	-	-	-	13	27	********	********
PANDORINA MORUM	-	-	418	-	-	-	-	-	********	********
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	27	********	********
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	-	21	********	********
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	-	********	********
PEDIASTRUM TETRAS V TETRAODON	-	27	-	-	-	-	-	-	********	********
PEDIASTRUM SP	-	-	-	-	-	-	102	-	********	********
SCENEDESMUS ABUNDANS	254	6	-	209	-	-	128	138	********	********
SCENEDESMUS ACUMINATUS	-	-	105	-	-	-	51	-	********	********
SCENEDESMUS ARMATUS	254	12	-	-	-	-	76	-	********	********
SCENEDESMUS ARMATUS V BICAUDATA	158	9	-	52	35	-	76	69	********	********
SCENEDESMUS BIJUGA	95	9	-	105	-	-	51	27	********	********
SCENEDESMUS DENTICULATUS	63	-	-	-	35	-	102	27	********	********
SCENEDESMUS QUADRICAUDA	380	20	-	209	-	-	230	268	********	********
SCENEDESMUS SP	127	3	-	-	35	200	179	-	********	********
SCHROEDERIA SETIGERA	-	-	52	26	-	-	-	-	********	********
SELENASTRUM MINUTUM	-	-	-	-	-	-	-	-	********	********
SPERMATOZOOPSIS EXULTANS	-	-	26	-	26	138	-	-	********	********
SPHAEROCYSTIS SCHROETERI	16	-	-	-	-	-	-	-	********	********
SPHAEROZOSMA GRANULATUM	-	13	-	-	-	-	-	-	********	********
SPONDYLOSIUM PLANUM	32	1	-	-	9	-	-	7	********	********
STAURASTRUM SP	16	4	-	-	-	-	-	7	********	********

TABLE H-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
TETRAEDRON CAUDATUM	-	12	-	-	9	-	25	-	*******	*******
TETRAEDRON GRACILE	-	-	-	-	-	-	-	-	*******	*******
TETRAEDRON MINIMUM	16	3	26	-	9	-	13	14	*******	*******
TETRAEDRON REGULARE	-	1	-	-	-	-	-	-	*******	*******
TETRAEDRON TRIGONUM	-	-	-	26	-	-	-	-	*******	*******
TETRAEDRON TRIGONIUM V SETIGERIUM	-	-	-	-	-	-	-	-	*******	*******
TREUBARIA SETIGERUM	-	-	-	-	-	-	38	27	*******	*******
UNID CHLOROPHYTA	32	-	288	105	17	8	64	41	*******	*******
CRYPTOPHYTA										
CRYPTOMONAS EROSA	16	12	-	131	-	-	13	7	*******	*******
RHODOMONAS SP	16	1	26	-	-	-	-	-	*******	*******
PYRRHOPHYTA										
GLENODONIUM SP	-	10	26	-	-	-	13	14	*******	*******
PERIDINIUM SP	-	4	-	-	-	-	13	-	*******	*******
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	16	-	-	-	9	-	13	-	*******	*******

TABLE H-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
OPHIOCYTIUM CAPITATUM V LONGISPINUM	-	-	-	-	9	8	-	-	*******	*******
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	16	-	26	-	17	-	-	-	********	********
LAGYNION SCHERFFELII	16	-	78	-	-	-	-	-	********	********
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	-	6	-	-	-	-	-	-	********	********
ACHNANTHES SP	-	12	-	-	-	-	-	-	********	********
CAPARTOGRAMMA CRUCICULA	-	-	-	-	-	-	13	-	********	********
COSCINODISCUS SP	-	-	-	-	-	-	13	-	********	********
CYCLOTELLA GLOMERATA	32	4	5570	9676	1979	2184	370	131	********	********
CYCLOTELLA STELLIGERA	190	1	78	26	-	-	76	55	********	********
CYCLOTELLA SP	-	-	-	-	-	-	-	7	********	********
CYMBELLA MICROCEPHALA	-	6	-	-	-	-	-	-	********	********
EUNOTIA SP	-	1	-	-	-	-	-	-	********	********
FRAGILARIA CROTONENSIS	158	1	-	-	-	-	-	-	********	********
FRAGILARIA PINNATA	-	1	-	-	-	-	-	-	********	********
MELOSIRA AMBIGUA	238	4	-	62	-	-	13	27	********	********
MELOSIRA DISTANS	460	3	-	-	9	-	166	144	********	********
MELOSIRA GRANULATA	111	3	-	-	-	-	25	46	********	********
MELOSIRA GRANULATA V ANGUSTISSIMA	143	-	-	-	-	-	-	7	********	********
NAVICULA CAPITATA V HUNGARICA	-	-	-	-	-	-	13	-	********	********
NAVICULA LATEROPUNCTATA	-	-	-	-	-	-	-	-	********	********
NAVICULA PUPULA	-	3	-	-	9	-	-	-	********	********
NAVICULA SP	-	3	-	-	-	15	-	7	********	********
NITZSCHIA ACICULARIS	-	-	-	-	-	-	13	-	********	********
NITZSCHIA HOLSATICA	-	7	-	-	9	-	25	7	********	********

TABLE H-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
NITZSCHIA KUTZINGIANA	-	1	-	-	-	-	13	-	*******	*******
NITZSCHIA SP	-	3	-	-	-	-	-	-	*******	*******
PINNULARIA BICEPS	-	-	-	-	-	-	-	-	*******	*******
RHIZOSOLENIA SP	-	-	-	-	-	-	-	-	*******	*******
SYNEDRA DELICATISSIMA	-	-	-	-	-	-	13	-	*******	*******
SYNEDRA DELICATISSIMA V ANGUSTISSIMA	-	-	-	-	-	-	25	-	*******	*******
SYNEDRA RUMPENS V FAMILARIS	47	1	-	-	-	-	25	179	*******	*******
SYNEDRA ULNA	-	-	-	26	-	8	-	-	*******	*******
EUGLENOPHYTA										
EUGLENA SP	32	1	-	26	9	-	-	14	*******	*******
PHACUS SP	-	-	-	-	-	-	-	-	*******	*******
TRACHELOMONAS SP	-	-	-	-	-	-	-	-	*******	*******
PROTOZOA										
UNID CILIOPHORA	79	7	78	52	9	-	25	14	*******	*******
TOTAL NUMBER OF ORGANISMS	19716	775	23898	18408	3018	2898	7716	7602	******	******
NUMBER OF TAXA	45	53	28	24	25	11	49	44	******	******

TABLE H-6a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
ANABAENOPSIS SP	872	1703	1399	1220	1430	299	902	119	17	124
APHANIZOMENON FLOS-AQUAE	924	590	510	697	1830	149	1154	214	171	95
APHANOCAPSA DELICATISSIMA	-	-	684	1133	-	-	-	-	-	-
APHANOCAPSA ELACHISTA	-	1073	-	-	767	1494	-	713	-	-
APHANOTHECE NIDULANS	1395	-	-	-	-	-	-	-	-	-
CHROOCOCCUS DISPERSUS	139	80	-	732	-	-	-	24	-	361
CHROOCOCCUS LIMNETICUS	-	-	-	-	-	-	-	-	-	-
GOMPHOSPHAERIA WICHURAE	-	-	-	-	-	478	-	-	-	-
LYNGBYA CONTORTA	2266	939	915	1307	2964	747	1353	951	171	856
MERISMOPEDIA TENUISSIMA	-	429	418	-	2789	-	866	380	411	1826
OSCILLATORIA LIMNETICA	1830	1502	2445	1395	2615	1315	1876	1902	326	1141
POLYCYSTIS INCERTA	-	1073	523	2789	872	2241	902	1070	343	380
SPIRULINA LAXA	-	-	-	-	-	-	-	-	-	-
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	139	-	-	-	-	-	-
ANKISTRODESMUS FALCATUS	87	27	13	70	70	179	90	59	17	28
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	-	-	-	9
ANKISTRODESMUS SPIRALIS	52	94	26	152	70	45	18	47	9	9
CARTERIA SP	-	-	-	-	-	-	-	-	-	-
CHLAMYDOMONAS SP	-	-	-	-	-	-	-	-	-	-
CHLORELLA SP	-	-	-	-	17	-	-	-	-	-
CHODATELLA SUBSALSA	-	-	-	-	-	-	-	12	-	-
CLOSTERIUM SP	17	-	13	-	-	15	-	-	-	-
COELASTRUM CAMBRICUM	-	-	-	-	-	-	-	-	-	-
COELASTRUM MICROPORUM	-	-	-	-	-	119	-	-	-	-
COELASTRUM MORUS	-	-	-	-	-	-	-	-	-	-

TABLE H-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
COELASTRUM PROBOSCIDEUM	-	54	-	70	70	-	-	-	-	-
COELASTRUM SPHAERICUM	-	-	-	139	139	-	-	-	-	-
COSMARIUM SP	-	-	13	-	-	-	-	-	-	-
CRUCIGENIA APICULATA	-	268	105	139	418	60	216	190	69	-
DICTYOSPHAERIUM PULCHELLUM	-	429	105	139	837	60	-	95	-	304
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	-	-	-
ELAKATOTHRIX GELATINOSA	70	13	-	-	-	-	-	-	-	-
EUASTRUM SP	17	-	-	17	17	-	-	36	-	9
GOLENKINIA RADIATA	-	13	26	52	35	15	36	24	17	9
GONATOZYGON SP	-	-	-	-	-	-	-	-	-	-
GONIUM PECTORALE	17	-	-	-	-	-	18	36	26	-
KIRCHNERIELLA LUNARIS	70	-	13	70	-	60	-	47	-	47
KIRCHNERIELLA OBESA	52	-	39	-	-	-	-	47	-	-
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	70	30	72	-	-	-
MOUGEOTIA SP	-	-	-	-	-	-	-	-	-	-
OOCYSTIS SP	-	27	118	-	157	-	18	47	26	9
PANDORINA MORUM	-	-	-	-	-	-	-	-	17	-
PEDIASTRUM BIRADIATUM	-	107	52	-	-	-	72	-	34	-
PEDIASTRUM DUPLEX V CLATHRATUM	17	60	52	139	-	-	-	95	-	-
PEDIASTRUM OBTUSUM	-	322	52	-	-	-	289	-	-	-
PEDIASTRUM TETRAS V TETRAODON	-	-	-	17	-	-	72	-	-	-
SCENEDESMUS ABUNDANS	-	54	52	70	35	90	-	131	-	19
SCENEDESMUS ACUMINATUS	-	107	52	70	139	-	18	47	-	-
SCENEDESMUS ARMATUS	70	54	52	70	-	60	216	190	-	76
SCENEDESMUS ARMATUS V BICAUDATA	87	134	-	70	-	239	72	47	69	76
SCENEDESMUS BIJUGA	-	-	52	-	-	-	-	-	69	67
SCENEDESMUS DENTICULATUS	70	-	52	-	-	209	72	-	-	38
SCENEDESMUS QUADRICAUDA	436	107	366	453	349	149	505	273	420	390
SCENEDESMUS SP	35	-	52	105	-	149	36	95	51	19
SCHROEDERIA SETIGERA	-	-	-	-	-	-	18	-	-	-
SELENASTRUM MINUTUM	-	-	-	-	-	-	72	-	-	-
SPERMATOZOPSIS EXULTANS	-	-	-	-	-	-	-	-	-	-
SPHAEROZOSMA GRANULATUM	-	-	-	-	-	-	-	-	-	-
SPONDYLOSIUM PLANUM	35	13	-	-	-	-	-	-	-	-
STAURASTRUM SP	35	13	39	-	-	-	18	24	9	28
TETRAEDRON CAUDATUM	-	-	-	-	-	-	-	-	-	-
TETRAEDRON MINIMUM	105	13	26	17	35	-	84	-	26	9
TETRAEDRON TRIGONUM	-	-	-	35	-	30	-	-	-	-
TETRASTRUM HETEROCANTHUM	-	-	-	-	-	-	-	-	34	38

TABLE H-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
TETRASTRUM STAUROGENIFORME	70	-	-	-	-	-	-	-	-	-
TREUBARIA SETIGERUM	-	-	-	-	-	-	18	-	-	-
UNID CHLOROPHYTA	-	-	-	-	-	-	18	12	-	-
XANTHIDIUM ANTILOPAEUM	-	-	-	-	-	-	-	-	-	-
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	-	-	17	-	-	-	-	-
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	-	-	-	-	-	-	-
GLENODONIUM SP	-	-	-	-	-	-	18	-	-	-
PERIDINIUM SP	-	-	-	17	-	-	-	-	-	-
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	-	-	-	-	-	-	24	-	-

TABLE H-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	17	-	-	-	-	-	-	-	17	9
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	-	-	-
LAGYNION SCHERFFELII	-	-	-	17	-	45	36	-	9	-
BACILLARIOPHYCEAE (DIATOMS)										
ACHNANTHES LANCEOLATA V DUBIA	-	-	-	-	-	15	-	-	-	9
ACHNANTHES SP	-	-	13	-	-	-	-	-	-	-
AMPHIPLEURA PELLUCIDA	-	-	-	-	-	-	-	-	-	-
COCCONEIS PLAC[illegible]A V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
COSCINODISCUS	-	-	-	-	-	-	36	-	-	-
CYCLOTELLA C[illegible]A	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA MENEGHINIANA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA STELLIGERA	122	80	118	157	87	164	126	71	94	95
CYMBELLA LEPTOCEROS	-	-	-	-	-	-	-	-	-	-
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
CYMBELLA MINUTA	-	-	-	-	-	-	-	-	-	-
EUNOTIA TENELLA	-	-	-	-	-	-	-	-	9	-
EUNOTIA SP	-	-	-	-	-	-	-	-	-	-
FRAGILARIA BREVISTRIATA	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CONSTRUENS	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CROTONENSIS	52	80	26	35	35	90	36	47	26	47
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA PARVULUM	-	-	-	-	-	-	-	-	-	9
GYROSIGMA ACUMINATUM	-	-	-	-	-	-	-	-	-	9
MELOSIRA AMBIGUA	645	349	144	70	209	388	234	71	146	200
MELOSIRA DISTANS	52	335	183	331	139	388	703	428	343	276
MELOSIRA GRANULATA	1360	992	889	854	558	1046	1046	416	386	276
MELOSIRA GRANULATA V ANGUSTISSIMA	244	255	131	-	35	119	307	-	43	-

TABLE H-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MELOSIRA VARIANS	-	-	-	-	-	-	-	-	-	-
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	15	-	-	-	-
NAVICULA FRACTA	-	-	-	-	-	-	-	-	-	-
NAVICULA GASTRUM	-	-	-	-	-	-	-	-	-	-
NAVICULA PUPULA	17	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	-	-	-	-	-	-	-	-	-
NEIDIUM AFFINE V LONGICEPS	-	-	-	-	-	15	-	-	-	-
NITZSCHIA ACICULARIS	52	13	26	-	17	30	18	12	9	-
NITZSCHIA HOLSATICA	227	-	13	174	139	119	433	-	69	-
NITZSCHIA KUTZINGIANA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA PALEA	-	-	13	-	17	-	18	-	9	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	18	-	-	-
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SP	17	13	26	35	-	-	-	-	17	9
RHIZOSOLENIA SP	17	-	-	-	17	15	[illegible]	-	-	-
SURIRELLA ATOMUS	-	-	13	-	-	-	-	-	-	-
SYNEDRA DELICATISSIMA	-	-	-	-	17	-	-	-	-	-
SYNEDRA RUMPENS V FAMILARIS	349	161	105	52	70	45	108	24	60	38
SYNEDRA ULNA	-	-	-	-	-	-	-	-	-	-
SYNEDRA ULNA V CONTRACTA	-	-	-	-	-	-	-	-	-	-
EUGLENOPHYTA										
EUGLENA SP	-	-	-	17	17	-	18	-	9	-
PHACUS SP	-	-	-	-	-	-	-	12	-	-
TRACHELOMONAS SP	-	-	13	-	-	-	-	12	-	19

TABLE H-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
PROTCZOA										
UNID CILICPHCRA	-	-	-	17	-	-	18	12	9	-
TOTAL NUMBER OF ORGANISMS	11939	11596	9947	13122	17099	10726	12262	8056	3587	6963
NUMBER OF TAXA	37	36	43	39	36	37	45	39	37	37

TABLE H-6b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26,1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
CYANOPHYTA										
ANABAENOPSIS SP	249	-	-	-	-	-	-	-	-	********
APHANIZOMENON FLOS-AQUAE	124	-	-	-	-	-	-	778	183	********
APHANOCAPSA DELICATISSIMA	-	40	-	-	-	-	-	-	-	********
APHANOCAPSA ELACHISTA	-	40	-	-	-	-	-	805	332	********
APHANOTHECE NIDULANS	-	24	-	-	-	-	-	-	-	********
CHROOCOCCUS DISPERSUS	199	87	-	-	-	-	-	-	133	********
CHROOCOCCUS LIMNETICUS	25	-	-	-	-	-	-	-	-	********
GOMPHOSPHAERIA WICHURAE	-	-	-	-	-	-	-	-	-	********
LYNGBYA CONTORTA	1494	-	-	-	-	-	-	201	415	********
MERISMOPEDIA TENUISSIMA	398	-	3985	-	206	110	-	2333	2391	********
OSCILLATORIA LIMNETICA	1121	19	-	-	-	41	-	349	581	********
POLYCYSTIS INCERTA	623	-	-	-	-	-	-	1877	332	********
SPIRULINA LAXA	-	-	-	-	-	-	-	13	-	********
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	100	-	100	-	15	-	-	-	33	********
ANKISTRODESMUS FALCATUS	112	P	12	28	7	-	4	80	25	********
ANKISTRODESMUS NANNOSELENE	-	-	25	8	-	-	-	-	-	********
ANKISTRODESMUS SPIRALIS	37	-	-	8	4	-	-	54	8	********
CARTERIA SP	-	-	12	-	4	-	-	-	-	********
CHLAMYDOMONAS SP	-	-	50	-	15	-	-	13	-	********
CHLORELLA SP	-	-	-	-	-	-	-	-	-	********
CHODATELLA SUBSALSA	-	-	12	20	-	-	-	-	-	********
CLOSTERIUM SP	-	P	-	-	-	-	-	-	-	********
COELASTRUM CAMBRICUM	-	3	-	32	-	-	-	-	-	********
COELASTRUM MICROPORUM	-	-	-	-	-	85	-	-	66	********
COELASTRUM MORUS	-	-	-	-	74	-	-	-	-	********

TABLE H-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
COELASTRUM PROBOSCIDEUM	-	-	-	-	-	-	-	54	-	*******
COELASTRUM SPHAERICUM	-	-	-	-	-	-	-	-	-	*******
COSMARIUM SP	-	10	-	-	-	-	-	-	-	*******
CRUCIGENIA APICULATA	199	-	50	-	-	-	-	-	-	*******
DICTYOSPHAERIUM PULCHELLUM	598	3	-	97	29	-	-	-	-	*******
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	13	-	*******
ELAKATOTHRIX GELATINOSA	-	-	-	-	-	-	-	27	-	*******
EUASTRUM SP	-	2	-	-	-	-	-	-	-	*******
GOLENKINIA RADIATA	25	-	37	-	15	41	-	-	17	*******
GONATOZYGON SP	-	P	-	-	-	-	-	-	-	*******
GONIUM PECTORALE	-	-	398	16	81	-	-	215	133	*******
KIRCHNERIELLA LUNARIS	50	-	-	4	-	-	-	-	41	*******
KIRCHNERIELLA OBESA	-	-	-	-	-	55	-	67	66	*******
MICRACTINIUM PUSILLUM V ELEGANS	-	-	-	-	-	-	-	-	-	*******
MOUGEOTIA SP	-	5	-	-	-	-	-	-	-	*******
OOCYSTIS SP	12	-	-	-	-	-	-	80	8	*******
PANDORINA MORUM	-	-	-	105	133	-	-	-	-	*******
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	-	-	*******
PEDIASTRUM DUPLEX V CLATHRATUM	50	-	-	-	-	-	-	27	66	*******
PEDIASTRUM OBTUSUM	-	-	-	-	-	-	-	-	-	*******
PEDIASTRUM TETRAS V TETRAODON	-	-	-	-	-	-	-	-	-	*******
SCENEDESMUS ABUNDANS	100	2	75	24	7	27	-	54	100	*******
SCENEDESMUS ACUMINATUS	-	-	62	32	15	-	-	80	-	*******
SCENEDESMUS ARMATUS	-	-	50	44	-	-	-	-	66	*******
SCENEDESMUS ARMATUS V BICAUDATA	224	2	124	-	22	55	-	80	83	*******
SCENEDESMUS BIJUGA	-	-	-	8	7	27	-	-	50	*******
SCENEDESMUS DENTICULATUS	25	-	-	-	15	-	-	-	8	*******
SCENEDESMUS QUADRICAUDA	573	3	249	24	7	-	23	442	291	*******
SCENEDESMUS SP	50	-	25	-	66	27	8	54	100	*******
SCHROEDERIA SETIGERA	-	-	-	-	4	-	-	27	-	*******
SELENASTRUM MINUTUM	-	-	-	-	-	-	-	-	-	*******
SPERMATOZOOPSIS EXULTANS	-	-	-	-	11	55	-	-	8	*******
SPHAEROZOSMA GRANULATUM	-	5	-	-	-	-	-	27	-	*******
SPONDYLOSIUM PLANUM	12	9	-	-	-	-	-	-	-	*******
STAURASTRUM SP	12	13	-	-	-	-	-	-	-	*******
TETRAEDRON CAUDATUM	-	P	-	4	-	-	-	-	-	*******

TABLE H-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	11	12	13	14	15	16	17	18	19	*******
TETRAEDRON MINIMUM	37	P	-	4	-	-	-	54	8	********
TETRAEDRON TRIGONUM	-	-	-	-	-	-	-	-	-	********
TETRASTRUM HETEROCANTHUM	50	-	-	-	-	-	-	-	-	********
TETRASTRUM STAUROGENIFORME	-	-	-	-	15	-	-	-	-	********
TREUBARIA SETIGERUM	-	-	12	-	-	-	4	-	8	********
UNID CHLOROPHYTA	12	4	25	-	7	14	-	-	8	********
XANTHIDIUM ANTILOPAEUM	-	4	-	-	-	-	-	-	-	********
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	P	12	48	11	-	4	-	-	********
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	P	-	-	-	-	-	-	-	********
GLENODINIUM SP	-	7	-	-	7	-	4	-	-	********
PERIDINIUM SP	-	-	-	-	-	-	-	-	-	********
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	12	-	-	8	-	-	-	-	-	********

TABLE H-6b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19
	NUMBER OF ORGANISMS AT STATION:								
CHRYSOPHYCEAE									
CHRYSOCOCCUS SP	-	-	-	4	-	-	-	-	-
DINOBRYON DIVERGENS	-	-	-	8	-	-	-	-	-
LAGYNION SCHERFFELII	25	-	-	-	-	-	-	-	-
BACILLARIOPHYCEAE (DIATOMS)									
ACHNANTHES LANCEOLATA V DUBIA	-	-	-	4	4	14	-	-	-
ACHNANTHES SP	-	4	-	12	-	-	-	-	-
AMPHIPLEURA PELLUCIDA	-	P	-	-	-	-	-	-	-
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	14	4	-	-
COSCINODISCUS SP	12	-	-	4	-	-	-	-	-
CYCLOTELLA CATENATA	-	-	12	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	124	-	1532	105	582	3097	638	521	249
CYCLOTELLA MENEGHINIANA	25	-	25	-	-	-	-	-	.7
CYCLOTELLA STELLIGERA	199	P	573	44	55	-	4	483	199
CYMBELLA LEPTOCEROS	-	-	-	-	-	-	-	-	8
CYMBELLA MICROCEPHALA	-	16	-	16	-	-	-	-	-
CYMBELLA MINUTA	-	P	-	-	-	-	-	-	-
EUNOTIA TENELLA	-	-	-	-	-	-	-	-	-
EUNOTIA SP	-	P	-	-	-	-	-	-	-
FRAGILARIA BREVISTRIATA	-	-	-	4	-	-	-	-	-
FRAGILARIA CONSTRUENS	-	4	-	68	-	-	-	-	-
FRAGILARIA CROTONENSIS	-	-	-	-	-	-	-	13	8
FRAGILARIA PINNATA	-	-	-	28	-	-	-	-	-
GOMPHONEMA PARVULUM	-	-	-	-	-	-	-	-	-
GYROSIGMA ACUMINATUM	-	-	12	-	-	-	-	-	-
MELOSIRA AMBIGUA	174	7	75	60	22	-	-	27	50
MELOSIRA DISTANS	336	-	50	12	4	27	-	241	133
MELOSIRA GRANULATA	349	-	-	-	7	-	-	134	108
MELOSIRA GRANULATA V ANGUSTISSIMA	100	-	-	-	-	-	-	27	-

TABLE H-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MELOSIRA VARIANS	-	-	-	-	-	-	8	-	-	********
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	-	-	-	-	********
NAVICULA FRACTA	-	-	-	-	-	-	4	-	-	********
NAVICULA GASTRUM	-	-	-	8	4	-	-	13	-	********
NAVICULA PUPULA	12	8	-	4	-	-	-	-	-	********
NAVICULA SP	-	-	12	8	-	14	4	-	-	********
NEIDIUM AFFINE V LONGICEPS	-	-	-	-	-	-	-	-	-	********
NITZSCHIA ACICULARIS	-	-	-	-	-	-	-	-	-	********
NITZSCHIA HOLSATICA	25	8	-	4	15	-	-	-	-	********
NITZSCHIA KUTZINGIANA	-	-	-	-	-	14	4	13	8	********
NITZSCHIA PALEA	-	-	-	-	-	-	-	-	8	********
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	-	********
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	-	-	-	-	-	4	-	8	********
NITZSCHIA SP	-	-	-	4	-	-	-	-	-	********
RHIZOSOLENIA SP	-	-	-	-	-	-	-	-	-	********
SURIRELLA ATOMUS	-	-	-	4	-	-	-	-	-	********
SYNEDRA DELICATISSIMA	12	6	-	-	4	-	-	-	8	********
SYNEDRA RUMPENS V FAMILARIS	25	-	-	48	-	-	-	13	-	********
SYNEDRA ULNA	-	-	-	-	-	-	8	-	-	********
SYNEDRA ULNA V CONTRACTA	-	-	-	-	-	14	-	-	-	********
EUGLENOPHYTA										
EUGLENA SP	12	-	12	20	-	-	-	27	-	********
PHACUS SP	-	-	-	8	-	-	-	-	-	********
TRACHELOMONAS SP	12	-	-	4	4	-	4	-	-	********
EUGLENA SP	12	-	12	20	-	-	-	27	-	********
PHACUS SP	-	-	-	8	-	-	-	-	-	********
TRACHELOMONAS SP	12	-	-	4	4	-	4	-	-	********

TABLE H-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
PROTOZOA										
UNID CILIOPHORA	12	10	-	12	4	14	-	-	-	*******
TOTAL NUMBER OF ORGANISMS	7977	342	7618	1007	1482	3715	729	9318	6364	******
NUMBER OF TAXA	44	38	28	42	35	19	16	36	40	******

TABLE H-7a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-7,1975)

*** PASS TWO - CODED DATA USED/STATIONS COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
STA LOC: / HORIZ LOC: / VERT LOC:	1	2	3	4	5	6	7	8	9	10
CYANOPHYTA										
APHANIZOMENON FLOS-AQUAE	-	-	2	2	-	-	-	-	-	-
APHANOCAPSA DELICATISSIMA	10	2	-	-	-	2	5	-	2	-
APHANOCAPSA ELACHISTA	-	-	-	3	-	-	-	-	-	-
APHANOCAPSA PULCHRA	-	6	4	-	-	-	-	-	-	-
APHANOTHECE NIDULANS	-	-	-	-	-	-	-	-	-	-
CHROOCOCCUS DISPERSUS	2	-	3	1	-	-	-	-	-	1
GOMPHOSPHAERIA WICHURAE	-	-	-	-	-	-	-	-	-	-
LYNGBYA CONTORTA	-	-	-	P	-	-	-	-	-	-
MERISMOPEDIA TENUISSIMA	P	11	3	11	1	2	9	9	7	2
OSCILLATORIA LIMNETICA	3	4	8	P	-	5	6	8	6	4
POLYCYSTIS INCERTA	23	5	5	3	3	-	3	6	10	-
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	P	-	-	-	-	-	-	-	-	-
ANKISTRODESMUS FALCATUS	P	1	P	P	-	P	-	-	5	P
ANKISTRODESMUS NANNOSELENE	P	-	P	-	-	-	-	P	-	P
ANKISTRODESMUS SPIRALIS	1	2	2	2	2	2	2	3	2	2
CARTERIA SP	-	-	-	-	-	-	-	-	P	-
CHLAMYDOMONAS SP	P	-	-	-	-	-	-	-	-	-
CHLORELLA SP	-	P	-	1	-	P	-	-	-	-
CHODATELLA CHODATI	-	-	-	-	P	-	-	-	-	-
CLOSTERIUM SP	-	-	-	P	P	-	P	P	-	-
COELASTRUM MICROPORUM	-	2	-	-	-	P	-	-	-	-
COELASTRUM SPHAERICUM	-	P	P	-	3	-	-	P	2	2
CRUCIGENIA APICULATA	P	-	P	P	-	2	P	-	-	-
CRUCIGENIA TETRAPEDIA	-	P	-	1	-	P	-	-	-	-
DICTYOSPHAERIUM PULCHELLUM	-	1	P	P	-	-	1	3	2	2
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	-	-	-	-	-	-

TABLE H-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CLAXATOTHRIX GELATINOSA	-	-	-	P	-	P	-	-	-	-
EUASTRUM SP	-	-	P	P	-	-	-	-	-	P
GOLENKINIA RADIATA	P	P	P	-	P	-	-	-	-	P
CONIUM PECTORALE	-	P	-	-	-	-	-	-	-	P
KIRCHNERIELLA LUNARIS	1	P	-	P	P	P	P	P	P	P
KIRCHNERIELLA OBESA	-	P	P	P	1	P	-	P	-	P
OOCYSTIS SP	P	P	2	-	1	P	P	P	2	1
PANDORINA MORUM	-	-	-	-	-	-	-	-	-	-
PEDIASTRUM BIRADIATUM	-	P	P	P	P	-	-	-	-	-
PEDIASTRUM DUPLEX	2	-	-	-	-	-	-	-	-	-
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	P	-	-	P	-
PEDIASTRUM OBTUSUM	1	P	2	P	P	2	P	-	P	2
PEDIASTRUM TETRAS V TETRAODON	P	-	-	-	-	-	-	-	-	-
SCENEDESMUS ABUNDANS	P	P	P	P	P	P	-	P	P	P
SCENEDESMUS ACUMINATUS	P	P	-	-	-	-	-	P	-	P
SCENEDESMUS ARMATUS	P	P	P	P	P	P	2	P	P	1
SCENEDESMUS ARMATUS V BICAUDATA	1	P	-	P	1	P	P	P	1	P
SCENEDESMUS BIJUGA	1	2	P	P	P	2	4	P	P	P
SCENEDESMUS DENTICULATUS	-	P	-	-	P	-	-	P	-	P
SCENEDESMUS QUADRICAUDA	2	2	3	3	2	2	3	2	3	P
SCENEDESMUS SP	-	-	-	-	P	P	P	-	P	P
SCHROEDERIA SETIGERA	-	-	-	-	-	-	-	-	-	-
SELANASTRUM MINUTUM	-	P	P	P	1	P	P	P	P	-
SPERMATOZOOPSIS EXULTANS	-	-	-	-	-	-	-	-	-	-
SPONDYLOSIUM PLANUM	-	-	-	-	-	-	-	-	-	-
STAURASTRUM SP	-	-	-	-	-	P	-	-	-	P
TETRAEDRON CAUDATUM	P	P	-	P	P	P	P	-	-	-
TETRAEDRON MINIMUM	-	P	P	-	-	P	P	-	P	-
TETRAEDRON MUTICUM	-	P	-	-	-	-	-	-	-	-
TETRAEDRON REGULARE	-	-	-	-	-	-	P	-	-	-
TETRAEDRON TRIGONUM	P	-	P	-	-	-	-	P	-	P
TETRAEDRON SP	-	P	-	-	-	-	-	-	-	-
TETRASTRUM ELEGANS	P	-	-	-	-	-	-	-	-	-
TETRASTRUM HETEROCANTHUM	-	P	-	-	-	-	-	P	-	P
TETRASTRUM STAUROGENIFORME	2	2	2	1	1	1	4	P	3	2
TREUBARIA SETIGERUM	-	-	P	-	-	-	P	P	-	-

TABLE H-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	-	-	-	-	-	-	-	-	P
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	P	-	-	-	-	-	-	-
GLENODONIUM SP	-	P	-	-	-	-	-	-	-	-
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	P	-	-	-	-	-	-	-	-
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	-	-	-	-	-	-	-	-	-
DINOBRYON DIVERGENS	-	-	-	-	-	-	-	-	-	-

TABLE H-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
BACILLARIOPHYCEAE										
ACHNANTHES EXIGUA	-	-	-	-	-	-	-	-	-	-
ACHNANTHES LANCEOLATA V APICULATA	-	-	-	-	-	-	-	-	-	-
ACHNANTHES LANCEOLATA V DUBIA	-	P	-	-	-	-	-	-	-	-
ACHNANTHES SP	-	-	-	-	-	-	-	-	-	-
ASTERIONELLA FORMOSA	-	-	-	-	-	-	-	-	P	-
CAPARTOGRAMMA CRUCICULA	-	-	-	-	-	-	P	-	-	-
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA CATENATA	-	-	-	P	-	-	-	-	-	-
CYCLOTELLA GLOMERATA	1	2	2	2	3	4	5	3	2	1
CYCLOTELLA MENEGHINIANA	-	-	-	-	-	-	-	-	-	-
CYCLOTELLA STELLIGERA	P	1	P	P	P	P	P	P	1	P
CYMBELLA MICROCEPHALA	-	-	-	-	-	-	-	-	-	-
CYMBELLA MINUTA	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CONSTRUENS	-	-	-	-	-	-	-	-	-	-
FRAGILARIA CROTONENSIS	-	-	1	-	-	-	P	-	-	P
FRAGILARIA PINNATA	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA ACUMINATUM	-	-	-	-	-	-	-	-	-	-
GOMPHONEMA PARVULUM	-	-	-	-	P	-	-	-	-	-
GOMPHONEMA SP	-	-	-	-	-	-	-	-	-	-
MELOSIRA AMBIGUA	4	7	4	4	12	7	3	3	6	7
MELOSIRA DISTANS	6	4	6	6	4	5	2	4	5	4
MELOSIRA GRANULATA	2	2	1	3	1	1	1	P	2	1
MELOSIRA GRANULATA V ANGUSTISSIMA	P	-	2	P	P	P	-	P	P	1
MELOSIRA VARIANS	-	-	-	-	-	-	-	-	-	-
NAVICULA CRYPTOCEPHALA	-	-	-	-	-	-	-	-	-	-
NAVICULA EXIGUA V CAPITATA	-	-	-	-	-	-	-	-	P	-
NAVICULA GASTRUM	-	-	-	-	-	-	-	-	-	-
NAVICULA PUPULA	-	-	-	-	-	-	-	-	-	-
NAVICULA RADIOSA	-	-	-	-	-	-	-	-	-	-
NAVICULA RHYNCOCEPHALA V GERMANII	-	-	-	-	-	-	-	-	-	-
NAVICULA SALINARUM V INTERMEDIA	-	-	-	-	-	-	-	-	-	-
NAVICULA SP	-	-	P	-	-	-	-	-	-	-
NITZSCHIA ACICULARIS	P	-	P	-	-	P	-	-	-	-

TABLE H-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
NITZSCHIA FONTICOLA	-	-	-	-	-	-	-	-	-	P
NITZSCHIA HOLSATICA	-	1	-	P	-	P	1	P	P	-
NITZSCHIA KUTZINGIANA	-	-	-	-	-	P	-	-	-	-
NITZSCHIA PALEA	-	-	-	-	-	-	-	-	-	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	P	P	-
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	-	-	-	-	-	-	-	-	-
NITZSCHIA SP	-	-	-	P	P	-	P	-	-	-
STEPHANODISCUS SP	P	-	-	-	-	-	-	-	-	-
SURIRELLA ATOMUS	-	-	-	-	-	-	-	-	-	-
SURIRELLA SP	P	-	-	-	-	-	-	-	-	P
SYNEDRA DELICATISSIMA	-	-	-	-	-	-	P	-	-	-
SYNEDRA RUMPENS V FAMILARIS	P	-	-	P	-	-	-	P	-	P
EUGLENOPHYTA										
EUGLENA SP	P	-	-	-	-	-	-	-	-	-
PHACUS SP	-	-	-	-	-	-	-	-	-	-
ZOOFLAGELLATES										
UNID CILIOPHORA	P	P	-	-	-	P	-	P	-	P
ROTIFERA										
UNID ROTIFER	-	-	-	-	-	-	-	-	P	-

TABLE H-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
TOTAL NUMBER OF ORGANISMS	68	61	54	51	41	42	55	44	63	39
NUMBER OF TAXA	39	43	37	38	30	36	32	33	33	39

TABLE H-7b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - PHYTOPLANKTON (CELLS/ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-7,1979)

*** PASS TWO - CODED DATA USED/STATIONS COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
STA LOC: / HORIZ LOC: / VERT LOC:	11	12	13	14	15	16	17	18	19	DATA
CYANOPHYTA										
APHANIZOMENON FLOS-AQUAE	-	-	-	-	-	-	-	-	-	*******
APHANOCAPSA DELICATISSIMA	-	-	-	-	-	-	-	-	4	*******
APHANOCAPSA ELACHISTA	-	-	-	-	-	-	-	-	-	*******
APHANOCAPSA PULCHRA	-	-	-	-	-	-	-	-	-	*******
APHANOTHECE NIDULANS	-	1	-	-	-	-	-	-	-	*******
CHROOCOCCUS DISPERSUS	P	-	P	-	-	-	-	1	1	*******
GOMPHOSPHAERIA WICHURAE	-	17	-	-	-	-	-	-	-	*******
LYNGBYA CONTORTA	-	-	-	-	-	-	-	-	-	*******
MERISMOPEDIA TENUISSIMA	2	-	-	-	-	-	-	-	10	*******
OSCILLATORIA LIMNETICA	8	1	-	-	-	-	1	4	9	*******
POLYCYSTIS INCERTA	12	-	-	-	-	-	-	4	5	*******
CHLOROPHYTA										
ACTINASTRUM HANTZSCHII	-	-	-	-	-	-	-	-	-	*******
ANKISTRODESMUS FALCATUS	P	P	-	-	P	P	-	P	P	*******
ANKISTRODESMUS NANNOSELENE	-	-	-	-	-	-	-	-	-	*******
ANKISTRODESMUS SPIRALIS	3	-	P	P	P	P	P	2	1	*******
CARTERIA SP	-	-	-	P	P	-	-	-	-	*******
CHLAMYDOMONAS SP	-	-	P	P	P	-	-	-	P	*******
CHLORELLA SP	-	-	P	-	P	-	-	-	-	*******
CHODATELLA CHODATI	P	-	P	P	P	-	-	P	-	*******
CLOSTERIUM SP	-	-	-	-	-	-	-	-	-	*******
COELASTRUM MICROPORUM	2	-	-	-	-	-	-	-	P	*******
COELASTRUM SPHAERICUM	-	-	-	P	-	-	-	P	P	*******
CRUCIGENIA APICULATA	P	-	-	-	-	-	-	P	-	*******
CRUCIGENIA TETRAPEDIA	-	P	2	-	-	-	-	-	-	*******
DICTYOSPHAERIUM PULCHELLUM	P	-	P	P	-	P	-	P	-	*******
DYSMORPHOCOCCUS VARIABILIS	-	-	-	-	P	-	-	-	-	*******

TABLE H-7b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
	NUMBER OF ORGANISMS AT STATION:									
ELAKATOTHRIX GELATINOSA	-	P	-	-	-	-	-	P	P	********
EUASTRUM SP	-	P	-	-	-	-	-	-	-	********
GOLENKINIA RADIATA	-	-	-	-	-	-	P	P	P	********
GONIUM PECTORALE	1	-	P	-	P	P	-	-	-	********
KIRCHNERIELLA LUNARIS	-	-	-	-	-	-	-	-	P	********
KIRCHNERIELLA OBESA	P	-	-	P	-	P	P	-	P	********
OOCYSTIS SP	P	P	P	-	-	-	-	P	P	********
PANDORINA MORUM	-	-	2	-	2	-	-	-	-	********
PEDIASTRUM BIRADIATUM	-	-	-	-	-	-	-	-	-	********
PEDIASTRUM DUPLEX	-	-	-	-	-	-	-	-	-	********
PEDIASTRUM DUPLEX V CLATHRATUM	-	-	-	-	-	-	-	-	-	********
PEDIASTRUM OBTUSUM	P	-	-	-	-	-	-	-	1	********
PEDIASTRUM TETRAS V TETRAODON	-	P	-	-	-	-	-	-	-	********
SCENEDESMUS ABUNDANS	P	P	P	P	-	-	-	-	-	********
SCENEDESMUS ACUMINATUS	-	-	-	-	-	-	-	-	-	********
SCENEDESMUS ARMATUS	P	P	P	P	-	-	P	-	-	********
SCENEDESMUS ARMATUS V BICAUDATA	P	P	-	-	-	P	P	1	1	********
SCENEDESMUS BIJUGA	P	1	-	-	-	P	-	P	P	********
SCENEDESMUS DENTICULATUS	P	1	P	-	P	-	-	-	P	********
SCENEDESMUS QUADRICAUDA	P	8	-	P	-	P	-	2	P	********
SCENEDESMUS SP	P	P	-	-	-	P	P	-	P	********
SCHROEDERIA SETIGERA	P	-	-	-	-	-	-	-	-	********
SELANASTRUM MINUTUM	-	-	-	-	-	-	-	-	-	********
SPERMATOZOOPSIS EXULTANS	P	-	P	-	-	-	-	-	-	********
SPONDYLOSIUM PLANUM	P	-	-	-	-	-	-	-	-	********
STAURASTRUM SP	-	-	P	-	-	-	-	-	-	********
TETRAEDRON CAUDATUM	-	P	-	-	-	-	-	-	P	********
TETRAEDRON MINIMUM	-	-	P	-	-	-	-	-	P	********
TETRAEDRON MUTICUM	-	-	-	-	-	-	-	-	-	********
TETRAEDRON REGULARE	-	-	-	-	-	-	-	P	-	********
TETRAEDRON TRIGONUM	P	-	-	-	-	-	-	-	P	********
TETRAEDRON SP	-	-	-	-	-	-	-	-	-	********
TETRASTRUM ELEGANS	-	-	-	-	-	-	-	-	-	********
TETRASTRUM HETEROCANTHUM	-	P	-	-	-	-	-	-	-	********
TETRASTRUM STAUROGENIFORME	2	-	-	-	-	-	-	P	2	********
TREUBARIA SETIGERUM	P	-	-	-	-	-	-	P	-	********

TABLE H-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
CRYPTOPHYTA										
CRYPTOMONAS EROSA	-	P	-	P	-	P	-	P	-	*******
PYRRHOPHYTA										
CERATIUM HIRUNDINELLA	-	-	-	-	-	-	-	-	-	*******
GLENODONIUM SP	P	-	-	-	-	P	-	-	-	*******
XANTHOPHYCEAE										
ARACHNOCHLORIS SP	-	-	-	-	-	-	-	-	-	*******
CHRYSOPHYCEAE										
CHRYSOCOCCUS SP	-	2	P	-	-	-	-	-	-	*******
DINOBRYON DIVERGENS	-	-	-	P	-	-	-	-	-	*******

TABLE H-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
BACILLARIOPHYCEAE										
ACHNANTHES EXIGUA	-	P	-	P	-	-	-	-	-	*******
ACHNANTHES LANCEOLATA V APICULATA	-	-	-	P	-	P	-	-	-	*******
ACHNANTHES LANCEOLATA V DUBIA	-	P	P	P	-	P	-	P	-	*******
ACHNANTHES SP	P	-	-	P	-	-	-	-	-	*******
ASTERIONELLA FORMOSA	-	-	-	-	-	-	-	-	-	*******
CAPARTOGRAMMA CRUCICULA	-	-	-	-	-	-	-	-	-	*******
COCCONEIS PLACENTULA V EUGLYPTA	-	-	-	P	-	-	-	-	-	*******
CYCLOTELLA CATENATA	-	-	P	P	-	-	-	P	P	*******
CYCLOTELLA GLOMERATA	4	-	17	P	16	2	5	8	7	*******
CYCLOTELLA MENEGHINIANA	-	-	-	-	P	-	-	-	-	*******
CYCLOTELLA STELLIGERA	1	P	2	4	P	P	P	1	1	*******
CYMBELLA MICROCEPHALA	-	P	-	P	-	-	P	-	-	*******
CYMBELLA MINUTA	-	-	-	P	P	-	P	-	-	*******
FRAGILARIA CONSTRUENS	-	5	-	6	-	-	-	-	-	*******
FRAGILARIA CROTONENSIS	-	-	-	-	-	-	-	-	-	*******
FRAGILARIA PINNATA	-	-	-	2	P	-	-	-	-	*******
GOMPHONEMA ACUMINATUM	-	P	-	-	-	-	-	-	-	*******
GOMPHONEMA PARVULUM	-	-	-	-	-	-	-	-	-	*******
GOMPHONEMA SP	-	-	-	P	-	P	-	-	-	*******
MELOSIRA AMBIGUA	3	-	1	P	-	-	-	7	2	*******
MELOSIRA DISTANS	2	P	P	P	P	P	P	2	2	*******
MELOSIRA GRANULATA	P	-	-	-	-	-	-	1	P	*******
MELOSIRA GRANULATA V ANGUSTISSIMA	P	-	-	-	-	-	-	-	-	*******
MELOSIRA VARIANS	-	-	-	-	-	-	P	-	-	*******
NAVICULA CRYPTOCEPHALA	-	-	-	P	P	-	P	-	-	*******
NAVICULA EXIGUA V CAPITATA	-	-	-	P	P	P	P	-	-	*******
NAVICULA GASTRUM	-	-	-	-	-	-	-	P	-	*******
NAVICULA PUPULA	-	P	-	-	P	P	P	-	-	*******
NAVICULA RADIOSA	-	-	-	P	-	-	-	-	-	*******
NAVICULA RHYNCOCEPHALA V GERMANII	-	P	-	-	-	-	-	-	-	*******
NAVICULA SALINARUM V INTERMEDIA	-	P	-	P	P	-	-	-	-	*******
NAVICULA SP	-	P	P	-	-	P	-	-	-	*******
NITZSCHIA ACICULARIS	-	-	-	P	-	P	-	-	-	*******

TABLE H-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19
NITZSCHIA FONTICOLA	-	-	-	-	-	-	-	-	-
NITZSCHIA HOLSATICA	P	P	P	P	P	P	-	-	-
NITZSCHIA KUTZINGIANA	-	-	-	P	-	-	-	-	-
NITZSCHIA PALEA	-	-	-	P	P	-	-	-	-
NITZSCHIA PALEACEA	-	-	-	-	-	-	-	-	-
NITZSCHIA TRYBLIONELLA V VICTORIAE	-	-	-	-	-	P	-	-	-
NITZSCHIA SP	-	P	-	-	-	P	-	-	-
STEPHANODISCUS SP	-	-	-	-	-	-	-	-	-
SURIRELLA ATOMUS	-	-	-	P	-	-	-	-	-
SURIRELLA SP	-	-	-	P	-	-	-	-	-
SYNEDRA DELICATISSIMA	-	P	-	-	P	P	-	-	-
SYNEDRA RUMPENS V FAMILARIS	-	-	-	-	-	-	-	P	-
EUGLENOPHYTA									
EUGLENA SP	-	-	P	P	-	-	P	-	-
PHACUS SP	-	-	-	-	-	P	-	-	-
ZOOFLAGELLATES									
UNID CILIOPHORA	P	-	-	P	P	-	-	P	P
ROTIFERA									
UNID ROTIFER	-	-	-	-	-	-	-	-	-

TABLE H-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
TOTAL NUMBER OF ORGANISMS	47	40	28	15	21	3	6	36	53	******
NUMBER OF TAXA	37	34	26	39	24	26	17	29	32	******

APPENDIX I

ZOOPLANKTON

LIST OF TABLES

TABLE I-1a

LAKE S;MINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	-	-	18	13	-	-	-	-	-	-
CYCLOPOIDA										
CYCLOPOID COPEPODITES	28	29	99	89	40	69	33	61	68	30
CYCLOPS SP	-	-	9	13	13	5	-	8	13	10
MESOCYCLOPS EDAX	9	-	9	-	-	-	-	-	-	-
TROPOCYCLOPS PRASINUS	-	-	-	-	-	-	-	-	-	-
HARPACTICOID										
ATTHEYELLA SP	-	-	-	-	-	-	-	-	-	-
HARPACTICOID COPEPODITES	-	-	-	-	-	-	-	-	-	-
NAUPLII	360	601	461	344	213	235	312	176	515	273
CLADOCERA										
ALONA SP	-	-	-	-	-	-	-	-	-	-
BOSMINA LONGIROSTRIS	189	278	163	127	148	83	123	115	135	111
CAMPTOCERCUS SP	-	-	-	-	-	-	-	-	-	-

TABLE I-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CERIODAPHNIA SP	-	-	-	-	-	-	-	8	-	-
CHYDORUS SP	-	7	-	-	-	-	-	-	-	-
DAPHNIA SP	-	7	-	13	-	5	8	-	13	10
DIAPHANOSOMA BRACHYURUM	-	-	-	-	7	-	-	-	-	-
HOLOPEDIUM AMAZONICUM	-	29	-	-	-	-	-	8	-	10
MOINA SP	-	-	-	-	-	-	-	-	-	-
ROTIFERA										
ASCOMORPHA SP	-	44	-	-	-	-	-	-	-	-
ASPLANCHNA PRIODONTA	-	-	-	13	-	5	-	-	27	-
BRACHIONUS ANGULARIS	-	-	-	-	-	-	-	-	-	-
BRACHIONUS CALYCIFLORUS	483	680	732	500	360	170	656	704	1369	707
BRACHIONUS SP	-	-	-	-	-	14	-	-	13	-
CHROMOGASTER OVALIS	275	579	235	127	7	110	247	153	257	71
CONOCHILUS UNICORNIS	28	-	45	89	7	23	-	-	-	-
EPIPHANES SP	-	-	-	-	-	-	-	-	-	20
GASTROPUS SP	38	22	-	-	-	5	8	-	-	-
HEXARTHRA SP	-	-	-	-	7	-	-	-	-	-
KELLICOTTIA SP	85	66	99	89	20	14	107	46	122	20
KERATELLA COCHLEARIS	180	256	117	178	53	143	370	69	244	141
KERATELLA SP	-	-	-	-	-	-	-	-	-	-
NOTOMMATA SP	-	-	-	-	27	-	-	-	-	-
PLATYIAS QUADICORNIS	-	-	-	-	-	-	-	-	-	-
PLEOSOMA HUDSONI	-	-	-	-	-	-	-	-	-	10
POLYARTHRA VULGARIS	483	308	208	318	787	359	99	76	-	71
SYNCHAETA SP	237	308	298	509	233	248	288	199	447	81
UNIDENTIFIED ROTIFERA	-	-	9	-	20	-	-	-	13	10

TABLE I-1a (cont.)

TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
	NUMBER OF ORGANISMS AT STATION:									
PROTOZOA										
DIDINIUM SP (PROTOZOAN)	-	-	-	-	-	-	8	-	54	50
UNIDENTIFIED PROTOZOAN	-	29	-	-	-	-	-	-	-	-
UNIDENTIFIED COLONIAL PROTOZOAN	-	-	-	-	-	-	-	-	-	30
VORTICELLA SP	256	352	434	509	200	9	1982	1054	2900	2515
MISCELLANEA										
HYDRA SP (COELENTERATE)	9	-	-	-	-	-	-	-	-	-
NEMATODA	9	-	-	13	-	-	-	-	-	-
UNIDENTIFIED OLIGOCHAETE	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	2669	3604	2936	3043	2134	1506	4251	2767	6190	4170
NUMBER OF TAXA	15	16	15	16	16	16	13	13	15	18

TABLE I-1b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	22	163	-	-	-	-	-	-	*******	*******
CYCLOPOIDA										
CYCLOPOID COPEPODITES	44	298	4	2	-	-	19	62	*******	*******
CYCLOPS SP	22	108	1	-	-	-	-	-	*******	*******
MESOCYCLOPS EDAX	-	27	-	-	-	-	-	8	*******	*******
TROPOCYCLOPS PRASINUS	-	-	-	P	-	-	-	-	*******	*******
HARPACTICOID										
ATTHEYELLA SP	-	-	-	P	-	-	-	-	*******	*******
HARPACTICOID COPEPODITES	-	-	-	-	3	-	-	-	*******	*******
NAUPLII	744	813	97	13	20	41	426	451	*******	*******
CLADOCERA										
ALONA SP	22	-	-	P	-	-	-	-	*******	*******
BOSMINA LONGIROSTRIS	66	6938	-	4	3	-	52	194	*******	*******
CAMPTOCERCUS SP	-	-	-	P	-	-	-	-	*******	*******
CERIODAPHNIA SP	7	352	1	-	-	-	4	-	*******	*******
CHYDORUS SP	51	27	6	3	7	-	4	8	*******	*******
DAPHNIA SP	29	135	-	-	-	-	4	-	*******	*******
DIAPHANOSOMA BRACHYURUM	-	54	-	-	-	-	-	-	*******	*******
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	-	-	9	*******	*******
MOINA SP	7	27	-	-	-	-	-	-	*******	*******

TABLE I-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
ROTIFERA										
ASCOMORPHA SP	7	-	-	2	-	-	7	-	*******	*******
ASPLANCHNA PRIODONTA	15	-	-	P	7	-	-	-	*******	*******
BRACHIONUS ANGULARIS	-	-	-	-	3	-	-	-	*******	*******
BRACHIONUS CALYCIFLORUS	1299	27	10	P	-	-	538	971	*******	*******
BRACHIONUS SP	-	-	2	-	-	-	-	8	*******	*******
CHROMOGASTER OVALIS	263	27	4	-	-	15	75	179	*******	*******
CONOCHILUS UNICORNIS	-	-	17	P	-	-	-	-	*******	*******
EPIPHANES SP	-	-	-	-	-	-	-	-	*******	*******
GASTROPUS SP	-	27	-	-	-	2	-	23	*******	*******
HEXARTHRA SP	-	-	-	-	-	-	-	-	*******	*******
KELLICOTTIA SP	73	-	-	-	-	-	26	31	*******	*******
KERATELLA COCHLEARIS	161	190	16	-	10	6	119	149	*******	*******
KERATELLA SP	-	27	-	-	-	-	-	-	*******	*******
NOTOMMATA SP	-	-	-	-	-	-	-	-	*******	*******
PLATYIAS QUADICORNIS	-	-	-	-	-	4	-	-	*******	*******
PLEOSOMA HUDSONI	-	-	-	-	-	-	4	-	*******	*******
POLYARTHRA VULGARIS	88	135	12	-	-	4	60	101	*******	*******
SYNCHAETA SP	307	-	6	3	-	-	7	54	*******	*******
UNIDENTIFIED ROTIFERA	7	-	1	-	-	2	-	-	*******	*******
PROTOZOA										
DIDINIUM SP (PROTOZOAN)	7	-	31	4	3	2	4	-	*******	*******
UNIDENTIFIED PROTOZOAN	-	-	-	-	17	-	-	39	*******	*******
UNIDENTIFIED COLONIAL PROTOZOAN	-	-	-	-	-	-	19	8	*******	*******
VORTICELLA SP	1175	-	-	-	-	75	246	97[illegible]	*******	*******

TABLE I-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	15	16	17	18	19	******	******
MISCELLANEA										
HYDRA SP (COELENTERATE)	-	-	-	-	-	-	-	-	********	********
NEMATODA	-	-	-	-	3	-	-	-	********	********
UNIDENTIFIED OLIGOCHAETE	-	-	-	-	-	4	-	47	********	********
TOTAL NUMBER OF ORGANISMS	4416	9375	208	31	75	155	1614	3319	******	******
NUMBER OF TAXA	21	17	14	14	10	10	17	18	******	******

TABLE I-2a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	2	-	-	2	10	7	18	-	2	-
CYCLOPOIDA										
CYCLOPOID COPEPODITES	8	9	8	14	89	49	67	187	14	33
CYCLOPS SP	4	7	14	3	30	21	18	17	-	
MESOCYCLOPS EDAX	-	-	-	-	-	-	-	-	-	-
HARPACTICOID										
UNIDENTIFIED HARPACTICOID	-	-	-	-	-	7	-	-	-	-
NAUPLII	110	113	154	26	865	759	787	738	110	179
CLADOCERA										
ALONA SP	-	-	-	-	-	-	-	-	-	-
BOSMINA LONGIROSTRIS	51	43	22	64	398	176	1284	1103	160	185
CERIODAPHNIA SP	-	-	-	-	-	-	-	8	-	-
CHYDORUS SPHAERICUS	-	-	-	-	-	-	-	-	-	-
CHYDORUS SP	-	-	-	-	-	-	-	-	-	-
DAPHNIA SP	18	2	8	6	40	35	12	8	-	5
DIAPHANOSOMA BRACHYURUM	-	-	-	-	10	-	-	-	-	-
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	-	-	8	-	-
MOINA SP	-	-	-	-	-	-	-	-	-	-

TABLE I-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
OSTRACODA										
UNIDENTIFIED OSTRACOD	-	-	-	-	-	-	-	-	-	-
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	-	-	-	-
ASPLANCHNA PRIODONTA	33	31	6	6	40	-	103	551	417	906
BRACHIONUS ANGULARIS	-	-	-	-	-	-	-	-	-	-
BRACHIONUS CALYCIFLORUS	2	-	-	-	-	-	-	-	33	14
BRACHIONUS SP	-	-	-	-	-	-	-	-	-	-
CHROMOGASTER OVALIS	-	-	-	-	-	-	12	8	104	83
CONOCHILUS UNICORNIS	449	537	386	518	4473	3373	7317	8855	1059	1025
EUCHLANIS SP	-	-	-	-	-	-	-	-	-	-
GASTROPUS SP	-	-	-	-	-	-	-	-	1	-
KELLICOTTIA LONGISPINA	-	41	25	-	258	520	157	220	2	5
KELLICOTTIA SP	51	-	-	23	-	-	-	-	-	-
KERATELLA COCHLEARIS	25	24	-	69	606	457	1205	992	247	132
LECANE SP	-	-	-	-	-	-	-	-	-	-
PLEOSOMA HUDSONI	-	-	-	-	-	-	-	-	2	27
POLYARTHRA VULGARIS	18	24	8	18	258	91	260	220	115	61
SYNCHAETA SP	-	-	-	-	-	-	-	34	10	5
TRICHOCERCA LONGISETA	-	-	-	-	-	-	-	-	-	5
TRICHOCERCA SP	2	-	-	1	-	7	6	-	2	-
PROTOZOA										
DIDINIUM SP (PROTOZOAN)	-	-	-	-	-	-	-	-	1	-

TABLE I-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
MISCELLANEA										
NEMATODA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED OLIGOCHAETE	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	773	831	631	750	7077	5502	11246	12949	2279	2665
NUMBER OF TAXA	13	10	9	12	12	12	13	14	16	14

TABLE I-2b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 2 (4/2-4/1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	13	14	15	16	17	18	19	******	******
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	-	-	-	-	-	-	9	-	*******	*******
CYCLOPOIDA										
CYCLOPOID COPEPODITES	5	13	4	10	-	2	45	8	*******	*******
CYCLOPS SP	-	2	-	-	-	-	-	-	*******	*******
MESOCYCLOPS EDAX	-	-	-	-	-	-	9	-	*******	*******
HARPACTICOID										
UNIDENTIFIED HARPACTICOID	-	-	4	-	-	-	-	-	*******	*******
NAUPLII	33	54	84	59	6	-	188	25	*******	*******
CLADOCERA										
ALONA SP	-	2	-	-	3	-	-	-	*******	*******
BOSMINA LONGIROSTRIS	28	3	9	14	3	-	188	23	*******	*******
CERIODAPHNIA SP	-	-	-	-	-	-	18	-	*******	*******
CHYDORUS SPHAERICUS	-	-	-	14	-	-	-	-	*******	*******
CHYDORUS SP	-	1	13	-	-	-	-	-	*******	*******
DAPHNIA SP	-	-	-	-	-	-	9	-	*******	*******
DIAPHANOSOMA BRACHYURUM	-	-	-	-	-	-	-	-	*******	*******
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	-	-	-	*******	*******
MOINA SP	-	-	4	-	-	-	-	-	*******	*******

TABLE I-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	13	14	15	16	17	18	19	******	******
OSTRACODA										
UNIDENTIFIED OSTRACOD	-	-	-	-	3	-	-	-	********	********
ROTIFERA										
ASCOMORPHA SP	1	-	-	-	-	-	-	-	********	********
ASPLANCHNA PRIODONTA	340	10	22	10	9	2	1390	65	********	********
BRACHIONUS ANGULARIS	-	1	-	-	-	-	-	-	********	********
BRACHIONUS CALYCIFLORUS	18	2	-	-	-	2	54	4	********	********
BRACHIONUS SP	-	-	35	3	-	-	-	-	********	********
CHROMOGASTER OVALIS	71	35	22	14	-	-	117	31	********	********
CONOCHILUS UNICORNIS	727	21	18	7	6	-	2951	263	********	********
EUCHLANIS SP	-	-	-	-	-	2	-	-	********	********
GASTROPUS SP	-	1	-	-	-	-	-	-	********	********
KELLICOTTIA LONGISPINA	-	-	-	-	-	-	-	-	********	********
KELLICOTTIA SP	-	-	-	-	-	-	-	-	********	********
KERATELLA COCHLEARIS	132	16	27	17	6	2	852	39	********	********
LECANE SP	-	1	-	-	-	-	-	-	********	********
PLEOSOMA HUDSONI	8	-	-	-	-	-	117	2	********	********
POLYARTHRA VULGARIS	57	2	4	10	-	-	386	31	********	********
SYNCHAETA SP	28	12	-	14	3	-	308	19	********	********
TRICHOCERCA LONGISETA	3	-	13	-	-	-	27	2	********	********
TRICHOCERCA SP	-	-	13	3	-	-	9	1	********	********
PROTOZOA										
DIDINIUM SP (PROTOZOAN)	-	-	142	-	53	-	-	-	********	********

TABLE I-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	13	14	15	16	17	18	19	******	******
MISCELLANEA										
NEMATODA	-	-	13	-	-	-	-	-	******	******
UNIDENTIFIED OLIGOCHAETE	-	-	40	-	-	-	-	-	******	******
TOTAL NUMBER OF ORGANISMS	1451	176	467	175	92	10	6674	513	******	******
NUMBER OF TAXA	13	16	17	12	9	5	17	13	******	******

TABLE I-3a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	437	119	179	140	74	151	163	94	-	81
DIAPTOMUS SP	-	-	-	-	-	-	-	-	156	-
CYCLOPOIDA										
CYCLOPOID COPEPODITES	823	258	508	721	495	349	425	422	370	733
CYCLOPS SP	298	45	45	60	84	91	11	12	14	38
ERGASILIS SP	-	15	-	-	10	-	-	-	14	5
MESOCYCLOPS EDAX	714	298	761	781	1042	863	410	246	85	353
TROPOCYCLOPS PRASINUS	-	-	-	20	-	-	68	-	28	16
HARPACTICOID										
HARPACTICOID COPEPODITES	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED HARPACTICOID	-	-	-	-	-	-	-	-	-	-
NAUPLII	3512	999	1523	1522	1116	1574	1623	2040	2958	2607
CLADOCERA										
ALONA SP	-	-	-	-	-	-	-	-	-	-
BOSMINA LONGIROSTRIS	11617	1520	1821	1482	1863	2119	231	223	71	163
BOSMINOPSIS DEITERSI	-	-	-	-	-	-	-	-	28	-
CERIODAPHNIA SP	20	45	30	-	10	30	8	-	-	11
DAPHNIA SP	109	30	134	80	-	60	15	23	-	16
DAPHNIA SP?	-	-	-	-	42	-	-	-	-	-
DIAPHANOSOMA BRACHYURUM	30	15	30	100	10	15	23	12	43	27
HOLOPEDIUM AMAZONICUM	635	74	134	270	95	151	19	59	14	54

TABLE I-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	-	-	-	-
ASPLANCHNA PRIODONTA	59	45	15	60	-	30	-	176	1123	81
BRACHIONUS ANGULARIS	-	-	-	-	-	-	4	59	142	-
BRACHIONUS CALYCIFLORUS	-	-	-	-	-	-	-	12	-	-
BRACHIONUS FORFICULA (?=ANGULARIS)	-	-	-	-	-	-	19	23	284	141
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	-	-	14	-
BRACHIONUS QUADRIDENTATA	-	-	-	-	-	-	-	-	-	-
BRACHIONUS SP	-	-	-	-	-	-	4	-	-	-
CHROMOGASTER OVALIS	-	-	-	-	-	-	4	-	227	5
CONOCHILUS UNICORNIS	169	313	-	180	32	-	26	352	697	380
EPIPHANES SP	-	-	-	-	-	-	-	-	-	-
FILINIA SP	-	-	-	-	-	-	-	-	14	-
GASTROPUS SP	-	-	-	-	-	-	-	-	142	38
GASTROPUS HYPTOPUS	-	-	-	-	-	-	-	-	-	-
HEXARTHRA SP	-	-	-	-	-	-	-	-	99	16
KELLICOTTIA SP	19	-	15	-	-	-	-	-	-	-
KERATELLA COCHLEARIS	20	45	119	40	21	76	45	141	57	49
KERATELLA SERRULATA	-	-	-	-	-	-	-	-	-	-
KERATELLA SP	-	-	-	-	-	-	-	-	-	5
LECANE SP	-	-	-	-	-	-	-	-	-	-
PLATYIAS PATULUS	-	-	-	-	-	-	4	-	-	-
PLEOSOMA HUDSONI	-	-	-	-	-	-	-	-	99	11
POLYARTHRA VULGARIS	40	134	45	80	42	-	23	363	313	92
SYNCHAETA SP	-	-	-	-	-	-	-	-	28	-
TRICHOCERCA LONGISETA	-	15	-	-	-	-	-	-	-	-
TRICHOCERCA SP	-	-	-	20	-	-	-	-	-	5
TRICHOCERCA SPP	-	-	-	-	-	-	-	-	43	-

TABLE I-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MISCELLANEA										
CHAOBORUS SP	-	-	-	-	-	-	-	-	14	.
ENTEROMORPHA SP	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	18693	4010	5350	5506	4936	5508	3129	4257	7077	4927
NUMBER OF TAXA	15	16	14	15	14	12	19	16	26	23

TABLE I-3b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	173	260	-	-	9	2	-	143	55	********
DIAPTOMUS SP	-	-	-	-	-	-	-	-	-	********
CYCLOPOIDA										
CYCLOPOID COPEPODITES	470	104	53	7	-	-	2	109	55	********
CYCLOPS SP	37	-	-	-	-	-	2	8	14	********
ERGASILIS SP	-	52	-	-	-	-	-	8	-	********
MESOCYCLOPS EDAX	513	104	-	-	-	-	-	34	96	********
TROPOCYCLOPS PRASINUS	6	-	-	-	-	-	-	-	14	********
HARPACTICOID										
HARPACTICOID COPEPODITES	-	-	-	-	-	2	-	-	-	********
UNIDENTIFIED HARPACTICOID	-	52	-	-	-	-	-	-	-	********
NAUPLII	1261	2963	177	46	192	21	7	942	661	********
CLADOCERA										
ALONA SP	-	52	-	-	-	-	-	-	-	********
BOSMINA LONGIROSTRIS	1632	2059	153	9	17	-	5	1598	992	********
BOSMINOPSIS DEITERSI	148	-	1248	5	524	5	-	547	468	********
CERIODAPHNIA SP	6	-	-	2	-	-	-	-	14	********
DAPHNIA SP	68	-	18	-	-	-	-	5	14	********
DAPHNIA SPP	-	-	-	-	-	-	-	-	-	********
DIAPHANOSOMA BRACHYURUM	240	52	530	5	140	2	2	8	234	********
HOLOPEDIUM AMAZONICUM	124	-	-	-	-	-	-	-	55	********

TABLE I-3b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19
	NUMBER OF ORGANISMS AT STATION:								
ROTIFERA									
ASCOMORPHA SP	-	-	-	-	9	-	-	-	-
ASPLANCHNA PRIODONTA	130	208	1554	11	647	3	7	143	468
BRACHIONUS ANGULARIS	-	-	1424	46	1136	33	12	411	55
BRACHIONUS CALYCIFLORUS	-	-	41	-	9	2	-	17	14
BRACHIONUS FORFICULA (TRIANGULARIS)	12	-	812	14	654	5	5	565	249
BRACHIONUS HAVANAENSIS	12	-	-	-	-	5	-	-	14
BRACHIONUS QUADRIDENTATA	-	-	-	-	9	-	-	-	-
BRACHIONUS SP	-	-	-	-	-	-	-	-	-
CHROMOGASTER OVALIS	192	-	-	-	-	-	-	-	110
CONOCHILUS UNICORNIS	1712	8888	712	50	17	5	24	2145	1547
EPIPHANES SP	-	-	-	30	-	-	-	-	-
FILINIA SP	6	-	-	-	-	-	-	-	-
GASTROPUS SP	68	-	282	2	-	2	-	201	96
GASTROPUS HYPTOPUS	-	-	-	-	3671	-	-	-	-
HEXARTHRA SP	6	52	12	-	-	-	-	101	41
KELLICOTTIA SP	6	52	-	-	-	-	-	-	-
KERATELLA COCHLEARIS	476	104	-	-	-	3	-	185	131
KERATELLA SERRULATA	-	-	229	-	-	-	-	143	-
KERATELLA SP	6	-	-	-	26	5	-	-	27
LECANE SP	-	-	-	-	9	-	-	-	-
PLATYIAS PATULUS	-	-	35	-	17	8	-	17	-
PLOESOMA HUDSONI	43	-	47	2	9	-	-	252	151
POLYARTHRA VULGARIS	210	-	277	7	9	-	-	372	249
SYNCHAETA SP	6	-	41	-	26	-	-	-	14
TRICHOCERCA LONGISETA	-	-	-	-	-	-	-	-	-
TRICHOCERCA SP	18	-	6	9	9	-	-	-	14
TRICHOCERCA SPP	-	208	-	-	-	-	-	-	-

TABLE I-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MISCELLANEA										
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	******
ENTEROMORPHA SP	-	-	-	2	-	-	-	-	-	******
TOTAL NUMBER OF ORGANISMS	7601	16010	7651	247	6939	103	66	8067	5357	******
NUMBER OF TAXA	27	15	19	16	20	15	5	22	27	******

TABLE I-4a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	221	79	473	545	154	158	289	299	310	971
CYCLOPOIDA										
CYCLOPOID COPEPODITES	228	20	84	97	75	104	69	33	65	23
CYCLOPS SP	14	10	12	26	-	-	7	33	6	84
MESOCYCLOPS EDAX	7	3	30	18	26	49	7	11	101	135
TROPOCYCLOPS PRASINUS	-	-	-	-	-	-	-	-	-	9
NAUPLII	306	384	754	721	646	267	626	510	1269	971
CLADOCERA										
BOSMINA LONGIROSTRIS	131	16	186	334	202	224	248	188	339	191
BOSMINOPSIS DEITERSI	-	3	-	-	-	-	-	11	310	387
CERIODAPHNIA SP	21	13	30	35	35	5	-	-	137	5
DAPHNIA SP	7	-	-	-	4	5	-	-	-	-
DIAPHANOSOMA BRACHYURUM	580	126	383	413	308	458	220	355	649	677
HOLOPEDIUM AMAZONICUM	-	-	18	9	9	5	7	22	42	9
MOINA SP	-	-	-	-	-	-	-	-	-	-
PLEUROXUS SP	-	-	-	-	-	-	-	-	-	-

TABLE I-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
OSTRACODA										
UNIDENTIFIED OSTRACODA	-	-	-	-	-	-	-	-	-	-
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	-	-	-	-
ASPLANCHNA PRIODONTA	-	-	-	-	-	-	48	188	143	145
BRACHIONUS ANGULARIS	14	-	-	-	-	11	7	11	-	-
BRACHIONUS CALYCIFLORUS	-	-	-	-	-	5	-	-	-	-
BRACHIONUS FORFICULA (?=ANGULARIS)	-	-	-	-	-	5	-	155	-	-
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	41	78	119	98
BRACHIONUS QUADRIDENTATA	-	-	-	-	-	-	-	-	-	-
BRACHIONUS SP	-	3	-	-	-	-	14	-	-	-
CHROMOGASTER OVALIS	7	-	-	-	-	-	27	11	-	-
CONOCHILOIDES SP	-	-	-	-	-	-	-	-	-	61
CONOCHILUS UNICORNIS	110	175	102	35	48	5	860	699	1948	5145
EPIPHANES SP	7	-	-	-	-	-	-	-	-	-
FILINIA LONGISETA	28	-	-	9	13	-	-	-	226	33
FILINIA SP	-	10	-	-	-	-	-	-	-	-
GASTROPUS SP	7	10	-	-	-	5	34	-	524	387
GASTROPUS HYPTOPUS	-	-	-	-	-	-	-	-	-	-
HEXARTHRA SP	-	30	6	35	-	-	-	55	310	-
KELLICOTIA LONGISPINA	-	10	6	9	-	-	7	78	-	-
KERATELLA COCHLEARIS	-	106	72	79	26	11	69	78	125	-
KERATELLA SERRULATA	-	-	-	-	-	-	7	33	-	-
KERATELLA SP	-	69	24	-	-	-	220	22	339	-

TABLE I-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
KERATELLA SPP	241	-	-	-	-	-	-	-	-	485
LECANE LUNA	-	-	-	-	-	-	-	-	-	-
PLATYIAS PATULUS	-	-	6	-	-	-	21	11	-	-
PLATYIAS QUADICORNIS	-	3	-	-	-	-	7	-	-	-
PLEOSOMA HUDSONI	-	-	-	-	-	-	-	-	-	-
POLYARTHRA VULGARIS	83	23	66	220	44	5	193	122	185	121
SYNCHAETA SP	145	20	-	9	4	-	536	122	36	14
TRICHOCERCA LONGISETA	34	7	12	26	22	-	14	22	95	14
TRICHOCERCA SIMILIS	-	-	-	-	-	-	7	-	-	-
TRICHOCERCA SP	7	3	6	9	-	-	-	11	-	-
MISCELLANEA										
CHAOBORUS SP	7	-	-	-	-	-	-	-	-	-
ENTEROMORPHA SP	-	-	6	-	-	-	-	-	-	-
HYDRACARINA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	2285	1123	2276	2629	1616	1322	3585	3158	7278	9965
NUMBER OF TAXA	21	22	19	18	15	16	25	25	21	21

TABLE I-4b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 4 (7/16-19/1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 11	12	13	14	15	16	17	18	19	DATA
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	209	11	-	3	-	-	-	267	132	********
CYCLOPOIDA										
CYCLOPOID COPEPODITES	8/	70	26	27	-	P	-	22	66	********
CYCLOPS SP	20	3	12	3	8	-	1	52	26	********
MESOCYCLOPS EDAX	5	7	3	-	-	-	-	7	26	********
TROPOCYCLOPS PRASINUS	-	-	-	-	-	-	-	-	-	********
NAUPLII	1324	546	70	8	20	11	4	869	258	********
CLADOCERA										
BOSMINA LONGIROSTRIS	479	116	3	11	8	P	-	200	73	********
BOSMINOPSIS DEITERSI	183	-	204	19	68	-	P	134	73	********
CERIODAPHNIA SP	-	-	-	-	4	-	-	134	20	********
DAPHNIA SP	-	3	6	-	-	-	-	37	-	********
DIAPHANOSOMA BRACHYURUM	901	56	47	3	20	9	-	401	185	********
HOLOPEDIUM AMAZONICUM	-	3	-	-	-	-	-	7	13	********
MOINA SP	-	7	371	16	32	3	-	178	13	********
PLEUROXUS SP	-	11	-	-	-	-	-	-	-	********

TABLE I-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
OSTRACODA										
UNIDENTIFIED OSTRACODA	-	7	-	-	-	-	-	-	-	*******
ROTIFERA										
ASCOMORPHA SP	-	-	-	8	12	2	-	-	7	*******
ASPLANCHNA PRIODONTA	311	56	123	43	92	36	P	-	7	*******
BRACHIONUS ANGULARIS	41	-	645	5	2070	-	6	67	33	*******
BRACHIONUS CALYCIFLORUS	163	3	44	5	24	2	-	126	20	*******
BRACHIONUS FORFICULA (?=ANGULARIS)	20	-	4078	-	1736	10	3	193	79	*******
BRACHIONUS HAVANAENSIS	163	-	-	-	-	3	-	134	53	*******
BRACHIONUS QUADRIDENTATA	-	-	-	-	12	-	-	-	-	*******
BRACHIONUS SP	-	-	-	46	-	5	-	-	-	*******
CHROMOGASTER OVALIS	-	-	123	-	-	2	-	-	-	*******
CONOCHILOIDES SP	-	-	470	-	-	-	-	-	-	*******
CONOCHILUS UNICORNIS	5933	166	1474	8	167	14	3	3541	603	*******
EPIPHANES SP	-	-	9	-	-	-	-	-	-	*******
FILINIA LONGISETA	-	-	-	-	4	-	-	-	-	*******
FILINIA SP	36	-	-	-	-	-	-	7	-	*******
GASTROPUS SP	738	18	1599	41	-	19	-	1165	225	*******
GASTROPUS HYPTOPUS	-	-	-	-	4470	-	-	-	-	*******
HEXARTHRA SP	-	81	-	-	8	2	1	22	33	*******
KELLICOTTIA LONGISPINA	-	-	-	-	-	-	-	-	7	*******
KERATELLA COCHLEARIS	265	25	3	-	-	-	2	7	33	*******
KERATELLA SERRULATA	-	-	1506	22	2400	10	-	7	40	*******
KERATELLA SP	178	-	-	-	-	-	-	15	-	*******

TABLE I-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
KERATELLA SPP	-	-	-	-	-	-	-	-	-	*******
LECANE LUNA	-	-	-	5	-	P	-	-	-	*******
PLATYIAS PATULUS	5	53	3	3	16	37	-	-	7	
PLATYIAS QUADICORNIS	-	-	-	-	-	-	-	-	-	*******
PLEOSOMA HUDSONI	-	-	-	-	-	-	-	7	-	*******
POLYARTHRA VULGARIS	636	39	251	41	-	P	-	67	13	
SYNCHAETA SP	-	67	17	-	4	-	6	-	53	*******
TRICHOCERCA LONGISETA	81	-	-	-	-	-	-	37	-	*******
TRICHOCERCA SIMILIS	-	-	-	-	-	-	-	-	-	*******
TRICHOCERCA SP	30	-	3	3	-	-	-	-	20	*******
MISCELLANEA										
CHAOBORUS SP	-	-	3	3	-	P	P	-	7	*******
ENTEROMORPHA SP	-	-	-	-	-	-	-	-	-	*******
HYDRACARINA	-	-	-	-	4	-	-	-	-	*******
TOTAL NUMBER OF ORGANISMS	11858	1348	11093	323	11179	170	29	7703	2125	******
NUMBER OF TAXA	22	21	25	21	21	20	11	26	28	******

TABLE I-58

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	388	382	260	696	286	178	79	148	219	66
CYCLOPOIDA										
CYCLOPOID COPEPODITES	81	149	90	84	216	-	-	78	118	142
CYCLOPS SP	-	37	11	84	5	17	3	9	38	91
MESOCYCLOPS EDAX	56	161	116	110	74	151	86	17	73	77
TROPOCYCLOPS PRASINUS	-	-	11	12	-	8	-	-	-	7
NAUPLII	976	1193	976	1429	679	973	879	634	1303	704
CLADOCERA										
BOSMINA LONGIROSTRIS	38	74	-	24	48	126	278	191	363	266
BOSMINOPSIS DEITERSI	-	12	5	-	-	-	3	69	337	609
CERIODAPHNIA SP	73	161	105	73	110	71	63	52	28	11
DAPHNIA SP	-	12	-	12	-	-	-	-	-	4
DIAPHANOSOMA BRACHYURUM	605	994	249	1030	474	433	617	963	820	533
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	-	-	-	-	15
MOINA SP	-	12	-	-	-	-	-	-	6	4
OSTRACODA										
UNIDENTIFIED OSTRACODA	-	-	-	-	-	-	-	-	-	-

TABLE I-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	-	-	-	4
ASPLANCHNA PRIODONTA	-	-	-	-	-	-	-	17	483	314
BRACHIONUS ANGULARIS	8	12	-	12	5	4	-	-	73	-
BRACHIONUS CALYCIFLORUS	-	-	-	-	-	-	-	-	-	-
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	-	-	208	171
BRACHIONUS QUADRIDENTATA	-	-	-	-	-	-	-	-	-	-
BRACHIONUS SP	8	12	-	-	-	-	-	-	-	-
CHROMOGASTER OVALIS	-	-	-	-	-	-	-	-	-	95
CONOCHILUS UNICORNIS	677	894	809	1392	589	143	199	148	1449	766
DIPLOIS SP	-	-	-	-	-	-	-	-	-	-
EUCHLANIS SP	-	-	-	-	-	-	-	-	-	-
FILINIA LONGISETA	-	-	-	12	-	-	-	-	62	-
GASTROPUS SP	48	112	61	12	121	8	181	78	146	-
GASTROPUS HYPTOPUS	-	-	-	-	-	-	-	-	-	-
HEXARTHRA SP	8	-	-	12	-	-	-	-	-	-
KELLICOTTIA LONGISPINA	-	-	11	-	-	-	-	-	-	-
KELLICOTTIA SP	8	12	-	37	47	-	-	9	6	-
KERATELLA COCHLEARIS	8	50	11	85	5	8	56	113	241	237
KERATELLA SERRULATA	-	-	-	-	-	-	23	-	17	-
KERATELLA SP	-	-	-	-	-	-	-	-	90	-
LECANE SP	-	-	5	-	-	-	-	-	-	-
LEPADELLA SP	-	-	-	-	-	-	-	-	-	-
MONOSTYLA SP	-	-	-	-	-	-	-	-	-	-
PLATYIAS PATULUS	8	-	-	-	-	-	5	-	-	-
PLATYIAS QUADICORNIS	-	-	-	12	-	-	-	-	-	-
PLEOSOMA HUDSONI	-	-	5	-	-	-	-	-	-	7
POLYARTHRA VULGARIS	32	87	83	61	137	105	60	191	410	234
SYNCHAETA SP	-	-	-	12	-	-	-	17	17	343
TRICHOCERCA LONGISETA	290	273	302	586	205	21	658	564	432	266
TRICHOCERCA SP	-	12	5	-	5	4	97	-	-	11

TABLE I-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MISCELLANEA										
CHAOBORUS SP	-	-	-	12	-	-	-	-	6	7
UNIDENTIFIED OLIGOCHAETE	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TARDIGRADE	-	-	-	-	-	-	-	-	-	-
UNIONID GLOCHIDIA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	[illegible]	4758	3156	5679	2944	[illegible]	2963	3298	6931	4984
NUMBER OF TAXA	17	20	18	22	16	15	16	17	24	25

TABLE I-5b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16, 1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	11	12	13	14	15	16	17	18	19	DATA
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	18	20	-	-	6	2	-	24	42	*******
CYCLOPOIDA										
CYCLOPOID COPEPODITES	125	25	168	38	-	5	2	12	47	*******
CYCLOPS SP	4	5	6	-	-	2	-	--	12	*******
MESOCYCLOPS EDAX	45	10	30	5	6	-	-	30	101	*******
TROPOCYCLOPS PRASINUS	4	5	6	-	-	-	-	-	-	*******
NAUPLII	1407	836	766	292	18	-	45	293	232	*******
CLADOCERA										
BOSMINA LONGIROSTRIS	193	75	-	19	-	59	-	85	131	*******
BOSMINOPSIS DEITERSI	2106	45	545	104	70	7	-	507	636	*******
CERIODAPHNIA SP	-	9	18	23	6	-	-	18	42	*******
DAPHNIA SP	-	-	-	-	-	2	-	-	-	*******
DIAPHANOSOMA BRACHYURUM	892	35	425	47	53	2	-	299	255	*******
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	-	-	-	-	*******
MOINA SP	72	5	1281	9	105	-	-	30	18	*******

TABLE I-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
OSTRACODA										
UNIDENTIFIED OSTRACODA	-	-	-	-	-	2	-	-	-	********
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	-	-	-	********
ASPLANCHNA PRIODONTA	294	5	1074	-	803	-	-	73	12	********
BRACHIONUS ANGULARIS	22	5	-	-	4927	43	-	49	-	********
BRACHIONUS CALYCIFLORUS	-	-	-	28	1002	292	-	-	-	********
BRACHIONUS HAVANAENSIS	-	-	102	-	1002	-	-	30	30	********
BRACHIONUS QUADRIDENTATA	-	-	-	-	-	84	-	-	-	********
BRACHIONUS SP	-	-	-	-	6	-	-	6	-	********
CHROMOGASTER OVALIS	-	-	-	-	-	-	-	-	-	********
CONOCHILUS UNICORNIS	3237	134	4437	79	228	54	-	604	255	********
DIPLOIS SP	-	-	-	5	-	-	-	-	-	********
EUCHLANIS SP	-	-	-	-	6	-	-	-	-	********
FILINIA LONGISETA	49	-	30	-	-	-	-	12	-	********
GASTROPUS SP	[illegible]	40	-	-	1336	13	-	18	101	********
GASTROPUS HYPTOPUS	-	-	3227	-	-	-	-	-	-	********
HEXARTHRA SP	31	20	6	5	252	-	13	37	-	********
KELLICOTTIA LONGISPINA	-	-	-	-	-	-	-	-	-	********
KELLICOTTIA SP	-	-	-	-	-	-	-	12	6	********
KERATELLA COCHLEARIS	45	5	66	-	-	-	2	37	-	********
KERATELLA SERRULATA	-	-	311	-	2419	-	19	43	63	********
KERATELLA SP	-	-	-	-	-	-	-	6	-	********
LECANE SP	-	5	-	9	-	-	-	6	-	********
LEPADELLA SP	-	-	-	-	-	2	-	-	-	********
MONOSTYLA SP	-	-	-	5	-	-	-	-	-	********
PLATYIAS PATULUS	-	-	-	207	334	100	-	6	-	********

TABLE I-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	12	13	14	15	16	17	18	19	******
PLATYIAS QUADICORNIS	-	-	-	-	-	-	-	-	-	*******
PLEOSOMA HUDSONI	13	-	24	-	-	-	-	6	-	*******
POLYARTHRA VULGARIS	-	119	766	61	668	2	-	49	53	*******
SYNCHAETA SP	63	-	78	-	-	3	-	-	-	*******
TRICHOCERCA LONGISETA	63	80	257	-	-	7	-	43	47	*******
TRICHOCERCA SP	179	-	-	-	6	21	-	12	-	*******
MISCELLANEA										
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	*******
UNIDENTIFIED OLIGOCHAETE	-	5	-	-	-	-	2	-	-	*******
UNIDENTIFIED TARDIGRADE	-	-	-	-	-	2	-	-	-	*******
UNIONID GLOCHIDIA	-	-	-	-	-	-	-	-	101	*******
TOTAL NUMBER OF ORGANISMS	11621	1484	14423	932	13253	704	83	2347	2186	******
NUMBER OF TAXA	21	21	21	16	20	20	6	27	19	******

TABLE I-6a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 6 (9/24-26,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	461	328	380	1280	233	222	111	307	141	410
CYCLOPOIDA										
CYCLOPOID COPEPODITES	-	966	169	460	174	72	140	321	220	982
CYCLOPS SP	162	73	33	33	35	15	33	11	10	36
MESOCYCLOPS EDAX	135	175	136	216	35	97	140	26	51	86
TROPOCYCLOPS PRASINUS	160	20	-	-	4	-	-	-	-	-
NAUPLII	2456	1097	1147	2382	1881	1830	1123	4262	1001	1990
CLADOCERA										
BOSMINA LONGIROSTRIS	474	277	193	208	146	139	302	190	213	487
BOSMINOPSIS DEITERSI	79	90	13	30	40	29	-	396	3	226
CERIODAPHNIA SP	125	63	43	60	8	249	84	23	24	166
DAPHNIA SP	-	-	-	30	11	32	8	-	-	-
DIAPHANOSOMA BRACHYURUM	818	473	476	1022	400	249	476	950	281	307
MOINA SP	-	-	-	-	-	-	-	60	-	-
ROTIFERA										
ASPLANCHNA PRIODONTA	30	-	20	10	6	3	3	15	79	70
BRACHIONUS ANGULARIS	156	-	13	109	-	-	-	-	10	108
BRACHIONUS CALYCIFLORUS	-	-	3	10	-	-	-	-	-	-

TABLE I-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	-	-	-	-
BRACHIONUS SP	-	52	6	-	3	-	-	-	-	-
BRACHIONUS SP	-		-	-	-	-	11	-	-	-
CHROMOGASTER OVALIS	-	-	3	-	-	-	-	-	-	4
CONOCHILUS UNICORNIS	-	-	42	40	53	278	140	473	1393	810
GASTROPUS SP	-	17	-	-	-	-	-	-	27	16
HEXARTHRA SP	-	-	-	-	-	19	-	-	-	-
KELLICOTTIA SP	-	-	-	-	-	-	-	-	-	-
KERATELLA COCHLEARIS	12	6	16	-	22	5	-	61	17	-
KERATELLA SERRULATA	-	-	-	-	-	-	-	-	-	-
KERATELLA SPP	-	-	-	-	-	-	-	-	-	-
LECANE SP	-	-	-	-	-	-	-	-	-	-
PLATYIAS PATULUS	-	-	-	-	-	-	-	-	7	4
PLEOSOMA HUDSONI	-	23	36	-	-	-	-	-	-	-
POLYARTHRA VULGARIS	37	23	6	129	8	27	8	30	72	140
SYNCHAETA SP	112	-	-	30	3	-	-	-	38	168
TRICHOCERCA LONGISETA	1072	693	365	813	174	86	113	321	141	60
TRICHOCERCA SP	12	6	3	10	-	-	3	8	-	-
PROTOZOA										
VOLVOX SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEA										
HYDRA SP (COELENTERATE)	-	-	-	-	-	-	-	-	-	-

TABLE I-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
TOTAL NUMBER OF ORGANISMS	6333	4652	2975	6926	2639	2983	2800	7023	3768	5696
NUMBER OF TAXA	16	17	20	18	18	16	15	16	18	18

TABLE I-6b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORGANISMS/100 L)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0181) PHASE II, CYCLE 6 (9/24-26,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

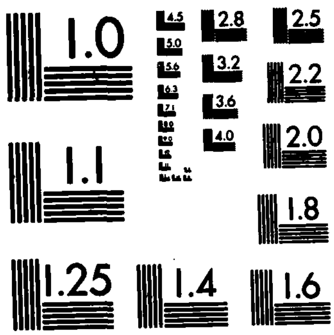
TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	141	398	1	29	-	-	-	43	28	********
CYCLOPOIDA										
CYCLOPOID COPEPODITES	188	102	51	45	7	-	5	126	-	********
CYCLOPS SP	29	31	3	3	5	-	-	12	23	********
MESOCYCLOPS EDAX	50	10	9	-	2	-	-	10	17	********
TROPOCYCLOPS PRASINUS	2	-	-	-	-	-	-	6	-	********
NAUPLII	830	745	61	210	75	16	108	295	245	********
CLADOCERA										
BOSMINA LONGIROSTRIS	89	41	-	-	2	2	84	191	11	********
BOSMINOPSIS DEITERSI	25	-	553	71	51	9	33	444	267	********
CERIODAPHNIA SP	21	-	18	3	-	2	-	6	11	********
DAPHNIA SP	2	-	2	-	-	-	-	10	-	********
DIAPHANOSOMA BRACHYURUM	75	92	116	6	10	-	-	126	171	********
MOINA SP	2	-	61	3	102	-	-	22	-	********
ROTIFERA										
ASPLANCHNA PRIODONTA	39	-	42	-	14	5	5	35	23	********
BRACHIONUS ANGULARIS	-	-	230	-	327	44	-	-	-	********
BRACHIONUS CALYCIFLORUS	-	10	10	-	227	5	-	14	-	********

TABLE I-6b (cont.)

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
	NUMBER OF ORGANISMS AT STATION:									
[illegible]NUS HAVANAENSIS	-	-	-	-	-	2	-	85	74	********
[illegible]NUS SP	-	-	-	3	2	2	-	-	-	********
[illegible]US SP	89	173	-	-	-	-	75	149	-	********
[illegible]ASTER OVALIS	-	-	-	-	-	-	-	-	-	********
[illegible]S UNICORNIS	1093	143	4822	1761	4153	710	904	3112	2201	********
[illegible]S SP	6	-	69	6	75	2	-	151	102	********
[illegible]A SP	-	-	-	-	-	2	-	-	-	********
[illegible]A SP	2	-	-	-	-	-	-	-	-	********
[illegible]CHLEARIS	-	10	-	3	-	-	5	6	-	********
[illegible]ENULATA	-	133	540	10	3256	49	42	169	-	********
[illegible]	75	-	-	-	-	-	-	-	-	********
[illegible]	-	10	-	3	-	2	-	-	-	********
[illegible]	-	-	1	23	75	2	-	-	-	********
[illegible]	-	-	-	-	-	-	-	-	11	********
[illegible]	64	-	78	58	177	12	5	106	51	********
[illegible]	8	-	38	126	126	47	248	18	-	********
[illegible]	39	-	-	-	-	-	-	39	-	********
[illegible]	2	82	-	-	-	-	-	2	23	********
[illegible]	-	-	-	-	-	2	-	-	-	*******
[illegible]		-	-	-	-	-	-	2	-	*******

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 6/8

UNCLASSIFIED DACW01-78-C-0101 F/G 8/8 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE I-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	12	13	14	15	16	17	18	19	
TOTAL NUMBER OF ORGANISMS	2871	1960	6705	2363	8726	915	1514	5179	3258	
NUMBER OF TAXA	22	14	19	17	18	18	11	25	15	

TABLE I-7a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORG/100 ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 7 (12/3-6.1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	1	2	3	4	5	6	7	8	9	10
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	144	41	178	32	248	94	268	60	43	102
CYCLOPOIDA										
CYCLOPOID COPEPODITES	94	95	97	86	166	135	149	60	58	51
CYCLOPS SP	14	109	16	-	62	27	-	-	43	-
MESOCYCLOPS EDAX	51	122	16	32	83	13	30	-	43	25
TROPOCYCLOPS PRASINUS	-	-	-	-	-	-	-	-	-	-
NAUPLII	621	489	599	590	1036	580	805	596	318	509
CLADOCERA										
BOSMINA LONGIROSTRIS	1568	1046	1101	1159	1595	1242	2804	715	752	840
CERIODAPHNIA SP	-	-	16	11	-	-	-	-	14	-
CHYDORUS SP	-	-	-	-	-	-	-	-	-	-
DAPHNIA SP	-	27	-	-	21	-	30	-	14	-
DIAPHANOSOMA BRACHYURUM	36	-	-	-	62	-	-	-	-	-
HOLOPEDIUM AMAZONICUM	-	-	-	-	-	13	30	-	-	-

TABLE I-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 1	2	3	4	5	6	7	8	9	10
ROTIFERA										
ASCOMORPHA SP	36	-	-	-	-	-	-	-	-	25
ASPLANCHNA PRIODONTA	188	272	243	107	248	270	268	268	130	407
BRACHIONUS ANGULARIS	-	-	-	-	-	-	-	-	-	-
BRACHIONUS CALYCIFLORUS	-	-	-	-	-	-	-	-	14	-
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	-	1609	-	-
BRACHIONUS QUADRIDENTATA	-	-	-	-	-	-	-	-	-	-
CEPHALADELLA SP	-	-	-	-	-	-	-	-	-	25
CHROMOGASTER OVALIS	-	-	-	-	-	-	-	924	-	-
CONOCHILUS UNICORNIS	130	380	178	215	-	459	507	417	405	153
FILINIA LONGISETA	-	-	-	-	-	-	36	-	-	-
FILINIA SP	-	27	-	-	62	13	-	-	14	25
GASTROPUS SP	14	-	-	-	-	-	-	-	29	-
KELLICOTIA LONGISPINA	7	-	-	-	21	27	30	-	-	-
KERATELLA COCHLEARIS	838	747	1263	1105	1802	1431	1820	-	1360	2063
LECANE LUNA	-	-	-	-	-	-	-	-	-	-
LECANE SP	-	-	-	-	-	-	-	-	-	-
LEPADELLA SP	-	-	-	-	-	-	-	-	-	-
MONOSTYLA SP	-	-	-	-	-	-	30	-	-	25
PLATYIAS PATULUS	-	-	-	-	-	-	-	-	-	-
PLEOSOMA HUDSONI	7	-	49	43	41	243	209	-	29	51
POLYARTHRA VULGARIS	600	937	955	958	414	756	984	387	477	968
SYNCHAETA SP	2148	3164	3578	3970	6669	4063	9546	6257	6367	3667
TRICHOCERCA LONGISETA	-	14	-	11	21	27	-	-	14	-
TRICHOCERCA SIMILIS	-	14	-	-	21	-	119	-	-	-
TRICHOCERCA SP	-	-	-	43	-	-	-	30	14	-
TRICHOTRIA TETRACTIS	-	-	-	-	-	-	-	-	-	-
TROCHOSPHAERA SOLSTITIALIS	-	95	-	32	83	27	-	-	-	255
UNIDENTIFIED ROTIFERA	-	-	-	-	-	-	-	-	-	-

TABLE I-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MISCELLANEA										
HEXIGENIA SP	-	-	-	-	-	-	-	-	-	-
UNSPECIFIED IN MASTER FILE										
UNSPECIFIED TAXON	-	-	97	-	207	40	209	-	-	-
UNSPECIFIED TAXON	-	-	-	-	62	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	6516	7579	8386	7994	12924	9460	17848	11323	10138	9191
NUMBER OF TAXA	16	16	14	15	20	18	18	11	19	16

TABLE I-7b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY - ZOOPLANKTON (ORG/100 ML)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (12/3-6,1979)

*** PASS TWO - CODED DATA USED/STATIONS NOT COLLAPSED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 11	12	13	14	15	16	17	18	19	DATA
COPEPODA										
CALANOIDA										
DIAPTOMUS MISSISSIPPIENSIS	73	2221	8	-	-	P	-	116	122	********
CYCLOPOIDA										
CYCLOPOID COPEPODITES	25	122	19	8	2	7	2	68	11	********
CYCLOPS SP	-	-	-	1	2	1	-	-	33	********
MESOCYCLOPS EDAX	-	20	4	-	-	-	-	-	-	********
TROPOCYCLOPS PRASINUS	-	-	-	-	P	-	-	-	-	********
NAUPLII	405	3769	247	105	28	17	6	338	221	********
CLADOCERA										
BOSMINA LONGIROSTRIS	773	407	31	6	2	P	1	425	486	********
CERIODAPHNIA SP	-	306	15	4	1	-	-	29	-	********
CHYDORUS SP	-	20	-	5	2	P	-	-	-	********
DAPHNIA SP	-	-	-	-	P	P	-	-	-	********
DIAPHANOSOMA BRACHYURUM	8	-	8	-	-	-	-	-	22	********
HOLOPEDIUM AMAZONICUM	17	-	-	-	-	-	-	-	11	********

TABLE I-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
ROTIFERA										
ASCOMORPHA SP	-	-	-	-	-	-	1	-	11	********
ASPLANCHNA PRIODONTA	303	-	12	8	4	9	4	116	88	********
BRACHIONUS ANGULARIS	-	-	4	-	-	-	-	-	-	********
BRACHIONUS CALYCIFLORUS	388	20	378	4	13	19	6	309	332	********
BRACHIONUS HAVANAENSIS	-	-	-	-	-	-	-	-	-	********
BRACHIONUS QUADRIDENTATA	-	-	4	-	-	-	1	29	-	********
CEPHALADELLA SP	-	-	-	3	-	-	-	-	-	********
CHROMOGASTER OVALIS	-	-	-	-	-	-	-	-	-	********
CONOCHILUS UNICORNIS	174	1202	85	17	-	4	10	145	221	********
FILINIA LONGISETA	R	-	-	-	-	-	-	-	-	********
FILINIA SP	H	-	81	-	6	P	1	38	22	********
GASTROPUS SP	31	-	-	-	-	-	-	-	11	********
KELLICOTTIA LONGISPINA	H	-	-	-	-	-	-	-	22	********
KERATELLA COCHLEARIS	1535	143	69	5	P	1	9	116	199	********
LECANE LUNA	-	-	-	3	-	-	1	-	-	********
LECANE SP	-	-	-	-	P	-	-	-	-	********
LEPADELLA SP	-	20	-	-	-	-	-	-	-	********
MONOSTYLA SP	-	20	4	-	-	-	1	-	-	********
PLATYIAS PATULUS	-	-	-	6	P	-	1	-	-	********
PLEOSOMA HUDSONI	42	-	19	-	-	-	-	29	11	********
POLYARTHRA VULGARIS	641	326	189	16	-	1	12	232	508	********
SYNCHAETA SP	3870	387	838	36	18	14	34	1053	1824	********
TRICHOCERCA LONGISETA	17	-	-	-	-	-	-	19	11	********
TRICHOCERCA SIMILIS	17	-	-	-	-	-	-	29	11	********
TRICHOCERCA SP	-	-	-	-	2	-	3	-	-	********
TRICHOTRIA TETRACTIS	-	-	-	-	-	-	1	-	-	********
TROCHOSPHAERA SOLSTITIAUS	-	-	-	3	-	-	-	-	-	********
UNIDENTIFIED ROTIFERA	-	-	-	-	-	-	38	-	-	********

TABLE I-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MISCELLANEA										
HEXIGENIA SP	-	-	-	-	P	-	-	-	-	*******
UNSPECIFIED IN MASTER FILE										
UNSPECIFIED TAXON	34	-	-	1	P	-	-	155	66	*******
UNSPECIFIED TAXON	-	-	-	-	-	-	-	-	-	*******
TOTAL NUMBER OF ORGANISMS	8457	8983	2015	231	83	77	132	3266	4243	******
NUMBER OF TAXA	20	14	18	17	18	14	18	17	21	******

APPENDIX J

MACROINVERTEBRATES

LIST OF TABLES

TABLE J-1a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA R	62	44	405	12	75	12	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	6	-	6	-	6	-	-	37	-	-
TUBIFICIDAE										
TUBIFICIDAE	12	6	12	-	-	37	611	143	12	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 1	2	3	4	5	6	7	8	9	10
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	561	1084	143	336	424	2355	305	679	56	112
GONIOBASIS ALJANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	6	-	-	-	-	-	6	-	12	12
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	31	-	12	44
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	6	-	-
CHIRONOMUS SP	-	-	-	-	-	-	125	-	31	12
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	93	-	424	262
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	6	12	-	-	-	-	-	-

TABLE J-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
CRICOTOPUS SP	-	-	-	-	-	-	-	12	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	6	6	43	37	112	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	6	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	305	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	25	-	-	-	12	6	-	-
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	449	44	218	93
PSECTROCLADIUS SP	-	-	-	-	-	-	-	12	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	6	25	-	44	-	-	-	-	-
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	12	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	12	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED ORTHOCLADIINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	137	25	106	25
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
HYDROPTILLA SP	-	-	-	-	-	-	-	6	-	-
NEURECLIPISIS SP	-	-	-	-	-	-	12	193	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

TABLE J-1a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	62	-	6	-
CHAOBORUS SP	-	-	-	-	-	-	37	-	50	93
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	6	-	-	-	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	12	-	12	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	6	-	-	6
TOTAL NUMBER OF ORGANISMS	647	1140	622	360	555	2428	1935	1541	1039	659
NUMBER OF TAXA	5	4	7	3	5	6	15	16	11	9

TABLE J-1b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	11	12	13	14	15	16	17	18	19	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	231	-	-	-	6	-	125	28	*******
TURBELLARIA B	-	-	-	-	-	-	-	-	-	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	6	-	-	-	-	-	12	-	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	386	-	31	-	137	-	6	262	*******
TUBIFICIDAE										
TUBIFICIDAE	6	311	68	-	181	6	234	-	19	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	928	-	-	-	*******

TABLE J-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	118	168	230	25	318	193	37	1495	4355	********
GONIOBASIS ALABAMENSIS	-	-	-	-	-	-	-	6	65	********
HELISOMA SP	-	12	-	-	-	-	-	-	-	********
PHYSA SP	-	-	-	-	-	-	-	-	9	********
BIVALVIA										
EUPERA CUBENSIS	6	-	-	-	-	-	-	-	-	********
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	6	-	-	-	********
HYALELLA AZTECA	-	81	-	-	-	-	-	-	-	********
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	19	-	-	31	12	-	65	-	-	********
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	********
CHIRONOMUS SP	25	305	168	25	62	31	-	-	-	********
CLADOTANYTARSUS SP	-	19	-	-	-	6	-	-	-	********
CLADOPELMA SP	-	25	-	-	-	-	-	-	-	********
COELOTANYPUS SP	193	44	112	336	100	93	-	-	-	********
CORYNONEURA SP	-	-	-	-	-	-	19	-	-	********
NEAR CORYNONEURA SP	-	-	-	-	-	-	19	-	-	********
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	********

TABLE J-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	12	13	14	15	16	17	18	19	******
CRICOTOPUS SP	-	-	-	-	-	-	9	-	-	********
CRYPTOCHIRONOMUS FULVUS	68	75	87	19	31	19	19	-	-	********
CRYPTOCLADOPELMA SP	-	-	-	-	-	6	-	-	-	********
DICROTENDIPES LEUCOSCELIS	-	156	-	6	-	-	-	-	-	********
EINFELDIA NATCHITOCHEA	-	12	-	6	-	-	-	-	-	********
ENDOCHIRONOMUS SP	-	-	-	-	-	25	-	-	-	********
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	********
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	6	-	-	-	********
EUKIEFFERIELLA SP	-	-	-	-	-	12	-	-	-	********
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	********
MICROPSECTRA SP	-	56	-	-	-	-	-	-	-	********
PARACHIRONOMUS MONOCHROMUS	-	6	-	-	-	-	-	-	-	********
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	44	-	-	-	********
POLYPEDILUM HALTERALE	-	604	-	25	-	44	65	6	-	********
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	6	-	-	-	********
PROCLADIUS SP	37	31	505	131	19	81	-	-	-	********
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	********
PSEUDOCHIRONOMUS SP	-	-	-	-	-	25	-	-	-	********
RHEOTANYTARSUS SP	-	31	-	-	-	6	-	-	-	********
ROBACKIA DEMEIJERE	-	-	-	-	-	6	-	-	-	********
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	********
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	12	-	-	-	********
TANYTARSUS SP	-	6	-	50	-	12	-	-	-	********
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	********
UNDESCRIBED CHIRONOMINI A	-	-	-	25	-	-	-	-	-	********
UNIDENTIFIED ORTHOCLADIAN A	-	12	-	-	-	-	-	-	-	********
EPHEMEROPTERA										
HEXAGENIA SP	31	-	12	293	56	12	-	-	-	********
STENONEMA SP	-	-	-	-	-	12	-	-	-	********
TRICOPTERA										
HYDROPTILA SP	-	-	-	-	-	-	-	-	-	********
NEURECLIPSIS SP	-	19	-	-	-	-	-	-	-	********
OECETIS SP	-	-	-	-	6	-	-	-	-	********
POTAMYIA FLAVA	-	-	-	-	-	31	-	6	9	********
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	6	-	-	-	********

TABLE J-1b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	6	-	44	9	-	-	********
CHAOBORUS SP	44	31	1639	93	511	19	-	-	9	********
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	9	-	-	********
ENALLAGMA SP	-	6	-	-	-	-	-	-	-	********
GOMPHUS SP	-	-	-	-	-	-	-	-	-	********
NANPUS SP	-	-	-	6	-	6	28	-	9	********
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	9	-	-	********
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	6	-	-	-	********
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	6	-	-	-	-	-	********
NEMATODA	-	-	12	6	6	-	-	-	-	********
TOTAL NUMBER OF ORGANISMS	547	2633	2833	1120	1302	1846	522	1656	4765	******
NUMBER OF TAXA	10	24	9	18	11	31	12	7	9	******

TABLE J-2a

LAKE SEMINOLE HQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	6	-	-	-	-
TURBELLARIA B	93	112	514	112	648	125	125	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	6	19	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	-	6	367	93	162	287
OLIGOCHAETA FAMILY A										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	6	-	-	-	-

TABLE J-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	2411	1626	981	766	822	635	455	635	106	230
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
UNIONIDAE	-	-	-	-	-	-	-	-	6	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	6	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	19	37	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	6	-	31	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	6	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	68	6
CONCHAPELOPIA SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
NEAR CORYNONEURA SP	-	-	9	9	31	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	19	9	-	-	6	-	-	-
CRICOTOPUS SPP	12	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	6
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	19	31	37
CRYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	6	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	5	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	6	12	-
PARACLADOPELMA SP	-	-	-	-	-	-	6	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	6	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	156	50	-	-
POLYPEDILUM SPP	6	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	12	-	592	-
PSECTROCLADIUS SP	-	-	-	-	-	-	6	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	6	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	6	-	9	84	12	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	6	-	9	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	6	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	131	-

TABLE J-2a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	6	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	6	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	25	-	6	-
CHAOBORUS SP	-	-	-	-	6	-	-	-	44	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	6	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	12	-
NARPUS SP	-	-	-	-	-	-	-	-	6	-
PODURA AQUATICA	-	-	-	-	-	6	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	6	-	-	31
TOTAL NUMBER OF ORGANISMS	1346	1757	1560	1017	1519	784	1206	815	1213	597
NUMBER OF TAXA	8	3	7	6	5	6	17	7	14	6

TABLE J-2b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	11	13	14	15	16	17	18	19	******	******
PLATYHELMINTHES-TURBELLARIA										
TURRELLARIA	-	-	6	-	-	-	1364	31	*******	*******
TURBELLARIA B	-	-	-	-	-	159	-	44	*******	*******
ANNELIDA--HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	12	-	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	31	-	-	-	12	-	*******	*******
TUBIFICIDAE										
TUBIFICIDAE	-	530	6	318	318	37	6	50	*******	*******
OLIGOCHAETA FAMILY A										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	*******	*******

TABLE J-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 11	13	14	15	16	17	18	19	******	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	44	125	62	199	710	9	3296	2729	*******	*******
GONIOBASIS SP	-	-	-	-	-	-	17	-	*******	*******
GYRAULUS SP	-	-	6	-	-	-	-	-	*******	*******
PHYSA SP	-	-	6	-	-	-	25	-	*******	*******
BIVALVIA										
UNIONIDAE	-	6	-	-	-	-	-	-	*******	*******
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	6	-	-	-	-	-	*******	*******
HYALELLA AZTECA	-	-	-	-	9	-	-	-	*******	*******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	12	-	9	-	-	-	*******	*******
ABLABESMYIA PARAJANTA	-	-	-	6	9	-	-	-	*******	*******
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	*******	*******
CHIRONOMUS SP	6	125	-	-	-	-	-	-	*******	*******
CLADOTANYTARSUS SP	-	-	-	-	149	-	-	6	*******	*******
CLADOPELMA SP	-	-	12	-	-	-	-	-	*******	*******
COELOTANYPUS SP	274	206	336	6	-	-	-	-	*******	*******
CONCHAPELOPIA SP	-	-	19	-	19	-	-	19	*******	*******
CORYNONEURA SP	-	-	-	-	-	-	-	-	*******	*******
NEAR CORYNONEURA SP	-	-	6	-	-	-	-	-	*******	*******
NEAR CORYNONEURA SP B	-	-	-	-	-	-	106	-	*******	*******
CRICOTOPUS SPP	-	-	-	-	-	-	-	-	*******	*******
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	*******	*******
CRYPTOCHIRONOMUS FULVUS	-	31	-	19	19	9	-	-	*******	*******
CRYPTOTENDIPES SP	-	-	-	-	9	-	-	-		

TABLE J-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	13	14	15	16	17	18	19	******	******
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	*******	*******
EINFELDIA NATCHITOCHEA	-	-	149	-	-	-	-	-	*******	*******
ENDOCHIRONOMUS SP	-	-	-	6	-	-	-	-	*******	*******
EPOICOCLADIUS SP	-	-	12	-	-	-	-	-	*******	*******
GLYPTOTENDIPES SP	-	-	-	-	-	-	6	-	*******	*******
HARNISCHIA SP	-	-	-	-	28	-	-	-	*******	*******
MICROCHIRONOMUS SP	-	6	19	19	-	-	-	-	*******	*******
MICROPSECTRA SP	-	-	37	-	19	-	-	-	*******	*******
PARACLADOPELMA SP	-	-	-	-	-	-	-	-	*******	*******
PARATENDIPES "CONNECTENS" (A)	-	-	6	-	-	-	-	-	*******	*******
PARATENDIPES SP	-	-	-	-	-	-	-	-	*******	*******
POLYPEDILUM HALTERALE	-	-	62	12	131	9	106	19	*******	*******
POLYPEDILUM SPP	-	-	-	-	-	-	25	6	*******	*******
PROCLADIUS SP	12	218	50	6	9	-	-	-	*******	*******
PSECTROCLADIUS SP	-	-	-	-	-	-	12	-	*******	*******
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	6	*******	*******
RHEOTANYTARSUS SP	-	-	6	-	-	-	-	-	*******	*******
ROBACKIA DEMEIJERA	-	-	-	-	-	19	-	-	*******	*******
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	9	-	-	-	*******	*******
THIENEMANNIELLA XENA	-	-	-	-	-	-	-	-	*******	*******
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	*******	*******
UNDESCRIBED CHIRONOMINI A	-	-	6	-	-	-	-	-	*******	*******
EPHEMEROPTERA										
CAENIS SP	-	-	37	-	-	-	6	-	*******	*******
HEXAGENIA SP	100	50	149	-	-	-	-	-	*******	*******
STENONEMA SP	-	-	-	6	-	-	-	-	*******	*******
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	6	9	-	-	6	*******	*******
OECETIS SP	6	-	6	-	-	-	-	-	*******	*******
POTAMYIA FLAVA	-	-	-	-	9	-	23	19	*******	*******
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	*******	*******

TABLE J-2b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	13	14	15	16	17	18	19	******	******
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	9	19	-	-	*******	*******
CHAOBORUS SP	12	417	19	6	-	-	-	-	*******	*******
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	*******	*******
GOMPHUS SP	-	-	-	12	-	-	-	-	*******	*******
NARPUS SP	-	-	-	-	-	-	-	-	*******	*******
PIDURA AQUATICA	-	-	-	-	-	-	-	-	*******	*******
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	6	6	19	-	-	-	*******	*******
TOTAL NUMBER OF ORGANISMS	454	1714	1072	527	1493	261	5106	2935	******	******
NUMBER OF TAXA	7	10	26	14	18	7	14	11	******	******

TABLE J-3a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	1	2	3	4	5	6	7	8	9	10
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA TURBELLARIA B	- 230	- 368	- 374	- 2822	- 1364	- 779	- -	- -	- -	- -
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	6	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	6	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	12	19	62	6	81	592	586	324	19
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	25	106	-	-	-	-	-

TABLE J-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	75	149	701	654	237	336	81	87	50	25
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	6	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	6
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	19	6
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	87	-	93	106	125	12	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	106	6	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	12	137
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	274	-	-	-	-	-	-	-	-

TABLE J-3a (cont.)

TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
	NUMBER OF ORGANISMS AT STATION:									
NEAR CORYNONEURA SP B	19	75	65	62	31	6	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	6	-	-	-	-	-	6	31	6	-
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	12	12	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	6	-	-	-	-	-
POLYPEDILUM HALTERALE	6	-	-	6	6	25	44	25	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	6	-	-	6
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	6	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	12	56	93	218	112	12	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	6	-	-	-	-
TANYTARSUS SP	-	-	-	6	-	-	12	12	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	6	-	93	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	75	19	112	81
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	6	-	-	6	-	12	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	6
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-

TABLE J-3a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	12	-	-
TOTAL NUMBER OF ORGANISMS	441	934	1345	3973	1993	1263	952	883	535	286
NUMBER OF TAXA	8	6	6	11	9	9	12	10	7	8

TABLE J-3b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION								
	11	12	13	14	15	16	17	18	19
PLATYHELMINTHES-TURBELLARIA									
TURBELLARIA	-	-	-	-	-	6	-	12	-
TURBELLARIA 3	-	-	-	-	-	-	442	25	193
ANNELIDA-HIRUDINEA									
HIRUDINEA	-	-	-	-	-	-	-	6	-
ANNELIDA-OLIGOCHAETA									
NAIDIDAE									
NAIDIDAE	-	-	-	-	-	12	6	62	6
TUBIFICIDAE									
TUBIFICIDAE	-	75	187	-	112	729	87	380	311
MISCELLANEOUS									
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	530	-	-

TABLE J-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	193	87	6	125	399	106	623	1738	********
GYRAULUS SP	-	-	-	-	-	12	-	-	-	********
LAEVIPLEX SP	-	-	-	-	-	-	-	-	-	********
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	6	-	********
SPHAERIUM SP	12	-	37	-	-	-	-	-	-	********
UNIONIDAE	-	6	-	-	-	-	-	-	-	********
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	6	-	********
HYALELLA AZTECA	-	19	-	-	-	-	-	-	-	********
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	25	-	-	-	-	-	********
ABLABESMYIA MALLOCHI	-	-	-	-	-	12	-	-	-	********
ABLABESMYIA TARELLA	-	-	-	-	-	6	-	-	-	********
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	12	-	-	********
CHIRONOMUS SP	-	-	6	-	44	-	-	-	-	********
CLADOTANYTARSUS SP	-	-	-	-	-	12	6	-	-	********
COELOTANYPUS SP	150	-	56	68	31	6	-	-	-	********
CORYNONEURA SP	-	-	-	-	-	31	6	-	-	********
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	********
NEAR CORYNONEURA SP B	-	-	-	-	-	6	-	-	-	********
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	324	-	-	********
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	12	-	-	********
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	6	12	19	-	-	********
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	6	-	********
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	6	-	********

TABLE J-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	********
LABRUNDINEA VIRESCENS	-	-	-	-	-	6	6	-	-	********
NILOTHAUMA SP	-	-	-	-	-	6	-	-	-	********
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	6	-	-	-	********
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	-	-	-	-	********
POLYPEDILUM HALTERALE	-	-	-	-	-	50	25	37	31	********
POLYPEDILUM SPP	-	-	-	-	-	6	-	-	44	********
PROCLADIUS SP	6	37	12	-	25	6	-	-	-	********
PSECTROCLADIUS SP	-	-	-	-	-	-	-	6	-	********
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	31	37	********
ROBACKIA DEMIJERA	-	-	-	-	-	25	143	-	6	********
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	6	-	-	-	********
TANYTARSUS SP	-	-	-	6	-	-	6	-	-	********
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	********
EPHEMEROPTERA										
HEXAGENIA SP	224	-	6	93	106	37	-	-	-	********
STENONEMA SP	-	-	-	-	-	19	50	-	6	********
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	25	********
TRICOPTERA										
NEURECLIPISIS SP	-	12	-	12	-	-	-	-	-	********
POTAMYIA FLAVA	-	-	-	-	-	-	-	19	330	********
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	6	-	-	-	********
CHAOBORUS SP	-	12	442	6	149	-	12	-	-	********
GOMPHUS SP	-	-	-	-	-	6	-	-	-	********
NARPUS SP	-	-	-	-	-	44	12	-	-	********
PODURA AQUATILA	-	-	-	-	-	6	-	-	6	********

TABLE J-3b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	31	-	6	******
TOTAL NUMBER OF ORGANISMS	392	354	833	216	598	1472	1835	1225	2739	******
NUMBER OF TAXA	4	7	8	7	8	26	19	14	13	******

TABLE J-4a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	1	2	3	4	5	6	7	8	9	10
	NUMBER OF ORGANISMS AT STATION:									
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	62	87	861	137	1140	19	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	12	19	224	-	6	68	149	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	-	243	1458	249	43	75
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	6	-	-	-
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	31	25	6	37	93	56	68	112	50	78
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
VIVPARUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	137	87	131	37
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	6	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	6
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	6	6	-	-	6	-	-	-	-	19
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	12	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	265	205	871	292	1382	436	2004	596	348	299
NUMBER OF TAXA	7	7	6	5	8	8	13	10	5	8

TABLE J-4a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
BIVALVIA										
EUPERA CUBENSIS	-	6	-	-	-	-	-	6	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	25
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	25	37	56	25
NEAR CHERNOVSKIIA ORBICUS	75	12	12	19	25	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	6	6	-	68	37
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	6	12	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	43	12	-	-
DICROTENDIPES LOBUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	6	-	12	68	25	25	6	12	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	19	6	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	93	50	56	31	81	6	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	19	-	-	-
TANYPUS STELLATUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	62	62	-	-

TABLE J-4b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	19	-	4268	648	*******
TURBELLARIA B	-	-	-	-	-	19	-	-	-	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	12	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	6	-	-	-	-	106	567	*******
TUBIFICIDAE										
TUBIFICIDAE	-	81	1296	-	405	231	9	149	187	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	12	-	-	-	*******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	6	137	68	12	118	964	355	829	3707	*******
GONIOBASIS SP	-	-	-	37	-	-	-	6	-	*******
VIVIPARUS SP	-	-	-	6	-	-	-	-	-	*******

TABLE J-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	********
SPHAERIUM SP	6	-	-	-	-	-	-	-	-	********
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	12	-	-	-	-	-	-	-	********
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	31	44	6	-	-	-	********
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	********
CHIRONOMUS SP	-	-	-	-	37	-	-	-	-	********
CLADOTANYTARSUS SP	-	-	-	-	-	-	19	-	-	********
COELOTANYPUS SP	106	6	-	68	60	31	-	-	-	********
CORYNONEURA SP	-	-	-	-	-	-	-	-	6	********
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	********
CRYPTOCHIRONOMUS FULVUS	-	-	6	-	25	12	9	-	-	********
DICROTENDIPES LOBUS	-	-	6	-	-	-	-	-	-	********
EINFELDIA NATCHITOCHEA	-	-	-	12	-	-	-	-	-	********
EPOICOCLADIUS SP	-	-	-	-	6	-	-	-	-	********
PARACHIRONOMUS MONOCHROMUS	-	-	-	6	-	-	-	-	-	********
POLYPEDILUM HALTERALE	-	-	6	-	-	-	-	-	-	********
POLYPEDILUM SPP	-	-	-	-	-	-	-	199	31	********
PROCLADIUS SP	-	-	44	6	50	6	-	-	-	********
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	12	12	********
ROBACKIA DEMEIJERA	-	-	-	-	-	-	-	-	-	********
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	********
TANYPUS STELLATUS	12	-	-	-	-	-	-	-	-	********
TANYTARSUS SP	-	-	-	6	-	-	-	-	-	********
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	********

TABLE J-4b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
EPHEMEROPTERA										
HEXAGENIA SP	6	6	44	186	137	18	9	-	-	********
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	125	12	********
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	6	-	-	-	12	6	********
OECETIS SP	-	-	-	-	-	-	-	12	-	********
POTAMYIA FLAVA	12	-	-	-	-	6	-	1134	75	********
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	6	-	-	-	********
CHAOBORUS SP	19	-	604	19	485	44	-	6	6	********
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	12	-	********
GOMPHUS SP	-	-	-	-	-	-	-	-	-	********
STENELMIS SP	-	-	-	-	-	-	9	-	-	********
MISCELLANEOUS INVERTEBRATES										
NEMATODA	6	-	-	-	6	-	-	-	-	********
TOTAL NUMBER OF ORGANISMS	173	242	2080	368	1333	1370	410	6878	5881	******
NUMBER OF TAXA	8	5	9	12	11	13	6	13	12	******

TABLE J-5a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01 78-C-0101) PHASE II, CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 1	2	3	4	5	6	7	8	9	10
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	19	-	-	-	-	-	-	-	-	-
TURBELLARIA D	804	-	355	383	598	62	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	9	-	6	75	-	19	-
TUBIFICIDAE										
TUBIFICIDAE	-	37	-	-	-	449	455	131	268	81
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	9	-	19	-	-	-	-
LUMBRICULIDAE	-	-	-	-	-	-	-	-	-	-

TABLE J-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	785	187	193	206	355	149	31	19	100	100
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	12	19	6	12	-
NEAR CHERNOVSKIIA ORBICUS	-	-	12	9	-	56	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	19	31	293	93	31
COELOTANYPUS SP	-	-	-	-	-	-	12	-	6	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	25	31	25	12	6
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	9	-	-	-	-	-	-	6	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	6	25	19	44	31
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	8	9	10
ROBACKIA DEMEIJERA	-	-	-	37	-	12	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	12	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
TRIBELOS SP	-	-	-	-	-	-	-	75	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
CLOEON SP	-	-	-	-	-	37	405	131	299	81
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
PHYLOCENTROPUS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	12	6	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	6	-
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	12	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-5a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1	2	3	4	5	6	7	8	9	10
TOTAL NUMBER OF ORGANISMS	1617	224	560	653	953	876	1090	717	859	330
NUMBER OF TAXA	4	2	3	6	2	14	10	10	10	6

TABLE J-5b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 11	12	13	14	15	16	17	18	19
PLATYHELMINTHES-TURBELLARIA									
TURBELLARIA	-	31	-	12	-	6	-	567	1159
TURBELLARIA B	-	-	-	-	-	68	274	-	12
ANNELIDA-HIRUDINEA									
HIRUDINEA	-	6	-	-	-	12	-	56	68
ANNELIDA-OLIGOCHAETA									
NAIDIDAE									
NAIDIDAE	5	-	-	12	19	118	305	19	685
TUBIFICIDAE									
TUBIFICIDAE	220	87	1414	12	623	193	93	-	93
MISCELLANEOUS									
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	12	1047	-	-
LUMBRICULIDAE	-	-	-	-	-	-	6	-	-

TABLE J-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11	12	13	14	15	16	17	18	19	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	176	100	1327	19	442	953	829	1501	2654	*******
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	6	-	-	-	-	*******
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	6	-	*******
HYALELLA AZTECA	5	561	-	12	-	6	-	-	-	*******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	25	-	-	-	-	-	********
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	********
CHIRONOMUS SP	19	-	69	25	-	-	-	-	-	********
COELOTANYPUS SP	-	19	31	25	-	-	-	-	-	********
CRICOTOPUS SP	-	-	-	-	-	6	-	-	-	********
CRYPTOCHIRONOMUS FULVUS	14	6	19	31	31		-	-	-	********
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	6	********
EINFELDIA NATCHITOCHEA	-	12	-	25	-	-	-	-	-	********
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	********
POLYPEDILUM HALTERALE	-	-	-	-	-	-	19	-	-	********
PROCLADIUS SP	14	19	56	25	19	25	-	-	-	********
PSEUDOCHIRONOMUS SP	-	6	-	-	-	-	-	-	-	********

TABLE J-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	11	12	13	14	15	16	17	18	19	******
ROBACKIA DEMIJERA	-	-	-	-	-	-	31	-	-	*******
STICTOCHIRONOMUS DEVINCTUS	5	-	-	-	-	-	19	-	-	*******
TANYTARSUS SP	-	-	6	-	-	-	-	-		
TRIBELOS SP	-	-	-	-	-	62	-	-	-	*******
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	*******
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	6	-	-	*******
EPHEMEROPTERA										
CAENIS SP	-	-	-	12	-	-	-	-	6	*******
CLOEON SP	-	-	-	6	-	-	-	-	-	*******
HEXAGENIA SP	23	-	44	579	25	156	-	-	-	*******
STENONEMA SP	-	-	-	-	-	-	-	-	44	*******
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	6	-	*******
OECETIS SP	-	6	36	-	-	-	-	-	-	*******
PHYLOCENTROPUS SP	-	-	-	31	-	-	-	-	-	*******
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	6	44	-	-	*******
CHAOBORUS SP	5	25	19	44	12	-	-	-	6	*******
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	*******
GOMPHUS SP	-	-	-	-	-	-	-	-	-	*******
NEUROCORDULIA SP	-	12	-	6	-	-	-	-	-	*******
PODURA AQUATILA	-	-	-	-	-	-	6	-	-	*******
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	6	-	12	6	-	-	-	*******
NEMATODA	5	-	-	6	-	-	-	-	-	*******

TABLE J-5b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11	12	13	14	15	16	17	18	19	******
TOTAL NUMBER OF ORGANISMS	511	890	3047	907	1189	1629	2679	2155	4733	******
NUMBER OF TAXA	11	13	11	18	9	14	12	6	10	******

TABLE J-6a

LAKE SE INOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEEPS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	149	19	19	-	131	-	467	748	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	19	-	-	-	19	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	37	-	-	-	-	19	37	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-6a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	93	392	1196	318	2710	224	19	411	-	131
GONIOBASIS ALBANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	19	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	19	-	19
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-6a (cont.)

TAXONOMIC CLASSIFICATION	1E	1N	1W	2E	2N	2W	3E	3N	3W	4E
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	75	-	-	-
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	-	-	-	19	-	75	-	-	-
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED ORTHOCLADIAN M	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
HYDROPTILLA SP	-	-	-	-	-	-	-	-	-	-
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

Header over station columns: NUMBER OF ORGANISMS AT STATION:

TABLE J-6a (cont.)

TAXONOMIC CLASSIFICATION	1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
	NUMBER OF ORGANISMS AT STATION:									
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	279	411	1253	318	2860	243	692	1178	0	180
NUMBER OF TAXA	3	2	4	1	3	2	6	3	0	2

TABLE J-6b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	4N	4W	5E	5N	5W	6E	6N	6W	7E	7N
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	19	19	75	19	131	19	19	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	19	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	-	-	-	112	112	822
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 4N	4W	5E	5N	5W	6E	6N	6W	7E	7N
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	692	167	673	93	505	3346	3495	224	673	168
GONIOBASIS ALBANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-		-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	19	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	262	56
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	19	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	19	-	-	19	93	19
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 4M	4W	5E	5M	5W	6E	6M	6W	7E	7M
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCIROMUS	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	37	-
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	19	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	-	-	19	112	-	-	-	-	-
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED ORTHOCLADIAN M	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
HYDROPTILLA SP	-	-	-	-	-	-	-	-	-	-
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

TABLE J-6b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	4N	4W	5E	5N	5W	6E	6N	6W	7E	7N
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	112	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	19	-	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	37	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	730	206	767	131	767	3365	3514	411	1327	1065
NUMBER OF TAXA	3	2	3	3	4	2	2	5	6	4

TABLE J-6c

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA R	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	112	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	897	37	374	19	-	19	19	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-6c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	75	1047	392	598	56	56	56	75	224	37
GONIOBASIS ALBANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	19	19	19	19	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	93	-	-	-	19	-	19	75	19	37
ABLABESMYIA PARAJANTA	-	-	-	19	-	-	-	-	-	-
CHIRONOMUS SP	56	-	-	-	75	-	19	-	37	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	280	-	-	-	411	318	542	385	224	206
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	-	-	37	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	-	-	112	75	112	149	-	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-6c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	19	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	916	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	19	-	-	-	-	-	-
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	1327	-	-	131	243	224	187	75	75	131
PSECTROCLADIUS SP	-	-	-	37	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERI	-	-	-	-	-	-	-	-	-	-
STENOCHIRONOMUS SP	-	-	-	37	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	37	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED ORTHOCLADIAN H	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	411	-	19	56	169	75	75	-	37	37
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
HYDROPTILA SP	-	-	-	19	-	-	-	-	-	-
NEURECLIPSIS SP	37	19	-	561	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

TABLE J-6c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	75	-	-	-	-	19	-	-	-	-
CHAOBORUS SP	112	-	-	-	56	37	56	56	112	112
EMPICIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	37	-	-	-	-	-	-	-	-
HARPUS SP	-	-	-	-	-	-	-	-	-	-
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	19	-	-	-	-	-	-	19	-	-
TOTAL NUMBER OF ORGANISMS	3420	1177	785	2673	1103	879	1141	674	747	860
NUMBER OF TAXA	13	5	3	14	8	9	10	7	8	6

TABLE J-6d

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11A	11B	11C	12E	12M	12W	13A	13B	13C	14E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	411	112	168	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	19	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	766	243	149	-	-	-	93
TUBIFICIDAE										
TUBIFICIDAE	-	-	19	[illegible]98	243	93	19	93	93	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-6d (cont.)

TAXONOMIC CLASSIFICATION	11A	11B	11C	12E	12M	12W	13A	13B	13C	14E
	NUMBER OF ORGANISMS AT STATION:									
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	112	-	243	224	149	131	131	411	149	37
GONIOBASIS ALBANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	19	19	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	19	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	75	56	112	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	37	19	-	-	-	-	-	-	-	19
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	56	19	617	149	149	131	206	168	75
CLADOTANYTARSUS SP	-	-	-	-	-	56	-	-	-	-
CLADOPELMA SP	-	-	-	37	19	19	-	-	-	-
COELOTANYPUS SP	168	149	262	.5	37	19	93	187	56	187
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	131	56	149	56	19	112	56	93	56
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-6d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11A	11B	11C	12E	12M	12W	13A	13B	13C	14E
DICROTENDIPES LEUCOSCELIS	-	-	-	280	131	56	-	-	-	19
EINFELDIA NATCHITOCHEA	-	-	-	37	-	-	-	-	-	19
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	168	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	19	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	692	654	467	-	-	-	19
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	37	37	37	93	-	-	467	636	411	[illegible]
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	93	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-	-	-	-	-	-
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	19	-	-	-	149
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	78
UNIDENTIFIED ORTHOCLADIAN H	-	-	-	37	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	37	56	-	-	-	-	19	19	-	262
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
HYDROPTILLA SP	-	-	-	-	-	-	-	-	-	-
NEURECLIPSIS SP	-	-	-	37	-	19	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

TABLE J-6d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11A	11B	11C	12E	12M	12W	13A	13B	13C	14E
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	75	56	37	19	37	1663	1589	1663	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
ENALLAGMA SP	-	-	-	19	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
HARPUS SP	-	-	-	-	-	-	-	-	-	19
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	19
NEMATODA	-	-	-	-	-	-	19	19	-	-
TOTAL NUMBER OF ORGANISMS	410	523	711	4464	1906	1532	2654	3218	2633	1284
NUMBER OF TAXA	6	7	8	20	14	16	9	9	7	15

TABLE J-6e

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE I (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	19	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	19	-	392	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	19	523	-	19	-	467	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	2785	-	-	-	-

TABLE J-6e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	37	-	149	37	766	505	75	-	19	56
GONIOBASIS ALBANYENSIS	-	-	-	-	-	-	-	-	-	-
HELISOMA SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	19	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	75	-	37	-	-	-	-	-	131	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	131	56	-	-	-	93	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	19	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	467	355	224	75	-	-	-	280	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	37	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	37	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	19	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	37	56	-	19	37	37	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	19	-	-

TABLE J-6e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	19	56	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	19	-	-
EUKIEFFERIELLA SP	-	-	-	-	-	-	19	19	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	131	-	-
POLYPEDILUM HALTERALE	56	-	-	-	-	-	-	131	93	37
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	19	-	-	-	-
PROCLADIUS SP	149	37	56	-	-	-	-	243	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	75	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	19	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-	-	-	19	-	-
STENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	37	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	37	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED ORTHOCLADIAN N	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	280	336	56	112	-	-	-	37	-	-
STENONEMA SP	-	-	-	-	-	-	-	37	-	-
TRICOPTERA										
HYDROPTILLA SP	-	-	-	-	-	-	-	-	-	-
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	19	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	93	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	19	-	-

TABLE J-6e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	19	-	-	-	-	56	-	75	19	-
CHAOBORUS SP	262	19	1383	149	-	37	-	19	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	19	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	19	-	-	56	-
PROGOMPHUS OBSCURUS	-	-	-	-	-	-	-	-	-	19
UNIDENTIFIED COLEOPTERA	-	-	-	-	-	-	19	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	19	-	-	-	19	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	1364	747	2036	485	1383	3459	179	1925	934	112
NUMBER OF TAXA	9	4	7	7	5	8	6	24	11	3

TABLE J-6f

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 1 (2/19-22/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18E	18M	18W	19M	19W	******	******	******	******	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	75	262	37	-	56	*******	*******	*******	*******	*******
TURBELLARIA B	-	-	-	-	-	*******	*******	*******	*******	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	37	-	-	*******	*******	*******	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	19	-	-	523	*******	*******	*******	*******	*******
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	37	*******	*******	*******	*******	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	*******	*******	*******	*******	*******

TABLE J-6f (cont.)

TAXONOMIC CLASSIFICATION	18E	18M	18W	19M	19W	******	******	******	******	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	542	1551	2392	2916	5794	********	********	********	********	********
GONICBASIS ALDANYENSIS	-	19	-	-	131	********	********	********	********	********
HELISCMA SP	-	-	-	-	-	********	********	********	********	********
PHYSA SP	-	-	-	-	19	********	********	********	********	********
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	********	********	********	********	********
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	********	********	********	********	********
HYALELLA AZTECA	-	-	-	-	-	********	********	********	********	********
ARTHROPODA-INSECTA										
CHIRCNOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	********	********	********	********	********
ABLABESMYIA PARALANTA	-	-	-	-	-	********	********	********	********	********
CHIRCNOMUS SP	-	-	-	-	-	********	********	********	********	********
CLADOTANYTARSUS SP	-	-	-	-	-	********	********	********	********	********
CLADOPELMA SP	-	-	-	-	-	********	********	********	********	********
COELOTANYPUS SP	-	-	-	-	-	********	********	********	********	********
CORYNONEURA SP	-	-	-	-	-	********	********	********	********	********
NEAR CORYNONEURA SP	-	-	-	-	-	********	********	********	********	********
NEAR CORYNONEURA SP B	-	-	-	-	-	********	********	********	********	********
CRICCTOPUS SP	-	-	-	-	-	********	********	********	********	********
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	********	********	********	********	********
CRYPTOCLADOPELMA SP	-	-	-	-	-	********	********	********	********	********

TABLE J-6f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 18E	18M	18W	19M	19W	******	******	******	******	******
DICROTENDIPES LEUCOSCELIS	-	-	-	-	-	********	********	********	********	********
EINFELDIA NATCHITOCHEA	-	-	-	-	-	********	********	********	********	********
ENDOCHIRONOMUS SP	-	-	-	-	-	********	********	********	********	********
EPOICOCLADIUS SP	-	-	-	-	-	********	********	********	********	********
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	********	********	********	********	********
EUKIEFFERIELLA SP	-	-	-	-	-	********	********	********	********	********
GLYPTOTENDIPES SP	-	-	-	-	-	********	********	********	********	********
MICROPSECTRA SP	-	-	-	-	-	********	********	********	********	********
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	********	********	********	********	********
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	********	********	********	********	********
POLYPEDILUM HALTERALE	19	-	-	-	-	********	********	********	********	********
POLYPEDILUM NEAR ILLINOENSE	-	-	-	-	-	********	********	********	********	********
PROCLADIUS SP	-	-	-	-	-	********	********	********	********	********
PSECTROCLADIUS SP	-	-	-	-	-	********	********	********	********	********
PSEUDOCHIRONOMUS SP	-	-	-	-	-	********	********	********	********	********
RHEOTANYTARSUS SP	-	-	-	-	-	********	********	********	********	********
ROBACKIA DEMIJERA	-	-	-	-	-	********	********	********	********	********
STENOCHIRONOMUS SP	-	-	-	-	-	********	********	********	********	********
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	********	********	********	********	********
TANYTARSUS SP	-	-	-	-	-	********	********	********	********	********
XENOCHIRONOMUS SP	-	-	-	-	-	********	********	********	********	********
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	********	********	********	********	********
UNIDENTIFIED ORTHOCLADIAN N	-	-	-	-	-	********	********	********	********	********
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	********	********	********	********	********
STENONEMA SP	-	-	-	-	-	********	********	********	********	********
TRICOPTERA										
HYDROPTILA SP	-	-	-	-	-	********	********	********	********	********
NEURECLIPSIS SP	-	-	-	-	-	********	********	********	********	********
OECETIS SP	-	-	-	-	-	********	********	********	********	********
POTAMYIA FLAVA	-	19	-	-	19	********	********	********	********	********
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	********	********	********	********	********

TABLE J-6f (cont.)

TAXONOMIC CLASSIFICATION	18E	18M	18W	19M	19W
MISCELLANEOUS					
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-
CHAOBORUS SP	-	-	-	19	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-
ENALLAGMA SP	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-
NAPPUS SP	-	-	-	-	19
PROGOMPHUS OBSCURUS	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES					
ACARI	-	-	-	-	-
NEMATODA	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	636	1870	2466	2935	6598
NUMBER OF TAXA	3	5	3	2	8

TABLE J-7a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	1E	1M	1W	2M	2W	3M	3W	4M	4W	5E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA TURBELLARIA B	-	19	262	224	-	991	37	187	37	804
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE NAIDIDAE	19	-	-	-	37	-	-	-	-	-
TUBIFICIDAE TUBIFICIDAE	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-7a (cont.)

TAXONOMIC CLASSIFICATION	1E	1M	1W	2M	2W	3M	3W	4M	4W	5E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	2243	3850	1140	523	2729	1738	224	1196	336	262
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	37	-	-	75	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CONCHAPELOPIA SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	19	-	-	19	56
NEAR CORYNONEURA SP B	-	-	-	-	-	19	19	19	-	-
CRICOTOPUS SPP	37	-	-	-	-	-	-	-	-	-

TABLE J-7a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	1E	1M	1W	2M	2W	3M	3W	4M	4W	5F
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
CRYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	19	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	19	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	19	-	-	-	19	-	168	-	19
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	19	-	-	-	-	19	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-

TABLE J-7a (cont.)

TAXONOMIC CLASSIFICATION	1E	1M	1W	2M	2W	3M	3W	4M	4W	5E
	NUMBER OF ORGANISMS AT STATION:									
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	2356	3888	1402	747	2766	2842	280	1570	467	1141
NUMBER OF TAXA	6	3	2	2	2	7	3	4	4	4

TABLE J-7b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 5M	5W	6E	6M	6W	7E	7M	7W	8E	8M
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	19	-	-	-	-	-	-	-
TURBELLARIA B	753	187	262	112	-	-	374	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDINAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICINAE										
TUBIFICIDAE	-	-	19	-	-	878	19	206	224	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	19	-	-	-	-	-	-	-

TABLE J-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	5M	5W	6E	6M	6W	7E	7M	7W	8E	8M
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	1776	430	523	1159	224	19	1121	224	486	1065
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	[illegible]	-	-	-	-
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	19	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CONCHAPELOPIA SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 5M	5W	6E	6M	6W	7E	7M	7W	8E	8M
NEAR CORYNONEURA SP	-	37	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	19	-	-	-
CRICOTOPUS SPP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	56	-
CRYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	19	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	19	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	-	-	-	-	-	-	-	19	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACLADOPELMA SP	-	-	-	-	-	19	-	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	-	19	-
POLYPEDILUM HALTERALE	-	-	-	-	-	467	-	-	149	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	37	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	19	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	19	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	-	-	-	-	-	-	-	19	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-7b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	5M	5W	6E	6M	6W	7E	7M	7W	8E	8M
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	19	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	19	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	37	-	37	-	-
CHAOBORUS SP	-	19	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	19
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
POLJRA AQUATILA	-	-	19	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	19	-	-
TOTAL NUMBER OF ORGANISMS	2748	673	861	1271	224	1495	1552	581	953	1084
NUMBER OF TAXA	3	4	6	2	1	8	5	9	6	2

TABLE J-7c

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	8W	9E	9M	9W	10E	10M	10W	11E	11M	11W
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	56	75	280	131	224	262	374	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-7c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 8W	9E	9M	9W	10E	10M	10W	11E	11M	11W
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENS'	355	149	56	112	224	149	318	19	112	-
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
PHYSA SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
UNIONIDAE	-	-	19	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	19	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	19	56	19	-	-	-	-	-	19
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	131	56	19	-	-	19	299	243	280
CONCHAPELOPIA SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-7c (cont.)

TAXONOMIC CLASSIFICATION	8W	9E	9M	9W	10E	10M	10W	11E	11M	11W
	NUMBER OF ORGANISMS AT STATION:									
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SPP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	19	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	37	-	56	-	75	37	-	-	-
CRYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	37	-	-	-	-	-	-	-	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
PARACLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	710	561	505	-	-	-	-	19	19
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	-	56	168	168	-	-	-	75	56	168
STENONEMA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-7c (cont.)

TAXONOMIC CLASSIFICATION	8W	9E	9M	9W	10E	10M	10W	11E	11M	11W
	NUMBER OF ORGANISMS AT STATION:									
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	19
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	19	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	56	-	75	-	-	-	19	-	19
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	37	-	-	-	-	-	-	-	-
NARPUS SP	-	-	19	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	56	37	-	-	-
TOTAL NUMBER OF ORGANISMS	411	1326	1215	1104	448	542	804	412	430	524
NUMBER OF TAXA	2	11	8	9	2	4	6	4	4	6

TABLE J-7d

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	13E	13M	13W	14E	14M	14W	15E	15M	15W	16E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	19	-	-	-	-	-	-
TURBELLARIA D	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	37	56	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	785	617	187	-	-	19	168	635	149	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-7d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13E	13M	13W	14E	14M	14W	15F	15M	15W	16E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	112	112	149	56	93	37	206	318	75	1215
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
GYRAULUS SP	-	-	-	-	19	-	-	-	-	-
PHYSA SP	-	-	-	19	-	-	-	-	-	-
BIVALVIA										
UNIONIDAE	19	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	19	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	19
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	37	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	19	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	149	37	187	-	-	-	-	-	-	-
CLADOPELMA SP	-	-	-	-	19	19	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	206	280	131	336	262	411	-	19	-	-
CONCHAPELOPIA SP	-	-	-	-	-	56	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-

TABLE J-7d (cont.)

TAXONOMIC CLASSIFICATION	13E	13M	13W	14E	14M	14W	15F	15M	15W	16E
	NUMBER OF ORGANISMS AT STATION:									
NEAR CORYNONEURA SP	-	-	-	-	-	19	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SPP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	19	56	-	-	-	-	-	56	19
CRYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	318	37	93	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	19	-
EPOICOCLADIUS SP	-	-	-	37	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	-	19	19	37	-	37	-	19	-
MICROPSECTRA SP	-	-	-	75	19	19	-	-	-	19
PARACLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	19	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	187	-	-	-	37	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	168	224	262	56	-	93	-	-	19	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	19	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	19	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	112	-	-	-	-	-	-
HEXAGENIA SP	-	37	112	262	56	131	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	19	-	-	-

TABLE J-7d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	13E	13M	13W	14E	14M	14W	15F	15M	15W	16E
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	19	-	-	19
OECETIS SP	-	-	-	-	19	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	19
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	262	374	617	-	-	56	-	19	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	19	19	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	19	-	-	-	19	-	-
TOTAL NUMBER OF ORGANISMS	1720	1700	1720	1627	655	953	468	1066	356	1310
NUMBER OF TAXA	8	8	9	17	12	11	6	7	7	6

TABLE J-7e

LAKE SEMINOLE WQ MANAGEMENT ST DY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 2 (4/2-4/1979)

** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	16W	17W	17M	18E	18M	18W	19E	19M	19W	DATA
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	1514	-	2579	-	-	93	*******
TURBELLARIA B	-	-	318	-	-	-	-	131	-	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	19	19	-	-	-	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	19	19	-	-	-	*******
TUBIFICIDAE										
TUBIFICIDAE	635	37	37	19	-	-	131	-	19	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	*******

TABLE J-7e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	16W	17W	17M	18E	18M	18W	19E	19M	19W	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	206	-	19	3103	3533	3252	2673	4467	1047	*******
GONIOBASIS SP	-	-	-	37	37	37	-	-	-	*******
GYRAULUS SP	-	-	-	-	-	-	-	-	-	*******
PHYSA SP	-	-	-	37	-	37	-	-	-	*******
BIVALVIA										
UNIONIDAE	-	-	-	-	-	-	-	-	-	*******
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	*******
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	*******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	19	-	-	-	-	-	-	-	-	*******
ABLABESMYIA PARAJANTA	19	-	-	-	-	-	-	-	-	*******
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	*******
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	*******
CLADOPELMA SP	-	-	-	-	-	-	-	-	-	*******
CLADOTANYTARSUS SP	279	-	-	-	-	-	-	-	19	*******
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	*******
CONCHAPELOPIA SP	37	-	-	-	-	-	-	-	-	*******
CORYNONEURA SP	-	-	-	-	-	-	-	19	37	*******

TABLE J-7e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 16W	17W	17M	18E	18M	18W	19E	19M	19W
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-
CRICOTOPUS SPP	-	-	-	-	75	243	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	19	-	-	-	-	-	-	-
CRYPTOTENDIPES SP	19	-	-	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-
ENDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	19	-	-	-	-
HARNISCHIA SP	56	-	-	-	-	-	-	-	-
MICROCHIRONOMUS SP	-	-	-	-	-	-	-	-	-
MICROPSECTRA SP	19	-	-	-	-	-	-	-	-
PARACLADOPELMA SP	-	-	-	-	-	-	-	-	-
PARATENDIPES "CONNECTENS" (A)	-	-	-	-	-	-	-	-	-
PARATENDIPES SP	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	262	19	-	37	149	131	19	-	37
POLYPEDILUM SPP	-	-	-	-	56	19	-	-	19
PROCLADIUS SP	19	-	-	-	-	-	-	-	-
PSECTROCLADIUS SP	-	-	-	37	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	19
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	19	19	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	19	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-
UNDESCRIBED CHIRONOMINI A	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA									
CAENIS SP	-	-	-	-	-	19	-	-	-
HEXAGENIA SP	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-

TABLE J-7e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	16W	17W	17M	18F	18M	18W	19E	19M	19W	******
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	19	*******
OECETIS SP	-	-	-	-	-	-	-	-	-	*******
POTAMYIA FLAVA	-	-	-	131	19	131	-	-	56	*******
UNIDENTIFIED TRICOPTERA	-	-	-	-	-	-	-	-	-	*******
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	19	19	19	-	-	-	-	-	-	*******
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	*******
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	*******
GOMPHUS SP	-	-	-	-	-	-	-	-	-	*******
NARPUS SP	-	-	-	-	-	-	-	-	-	*******
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	*******
MISCELLANEOUS INVERTEBRATES										
NEMATODA	37	-	-	-	-	-	-	-	-	*******
TOTAL NUMBER OF ORGANISMS	1684	113	412	4915	3926	6486	2823	4617	1365	******
NUMBER OF TAXA	15	5	5	8	9	11	3	3	10	******

TABLE J-8a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	1E	1M	1W	2E	2M	2W	3M	3W	4E	4M
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA TURBELLARIA 3	56	299	336	916	187	-	692	56	1925	6542
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	57	-	-	-	37	19	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	75

TABLE J-8a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	37	112	75	-	112	336	561	841	748	1159
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	-	-	-	-	-	19	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	56	37	168	-	-	-	37	149	-	318
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	822	-	-	-	-	-

TABLE J-8a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1E	[illegible]	[illegible]	[illegible]	2M	[illegible]	[illegible]	[illegible]	4E	[illegible]
NEAR CORYNONEURA SP B	-	56	-	224	-	-	112	19	93	93
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	19	-	-	-	-	-	-	-
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	-	-	-	-	19
POLYPEDILUM HALTERALE	-	-	19	-	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	19	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	19	19	-	56	112	-	149	37	280	3/5
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	19
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-

TABLE J-8a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	[illegible]	[illegible]	[illegible]	[illegible]	2M	[illegible]	3M	[illegible]	4E	[illegible]
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	168	523	636	1233	1233	336	1551	1139	3084	8599
NUMBER OF TAXA	4	5	6	4	4	1	5	6	6	8

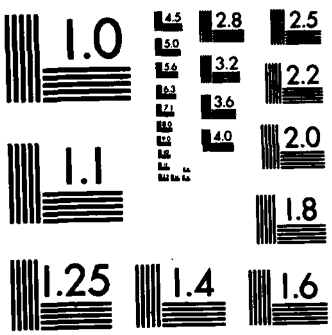
TABLE J-8b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	4W	5E	5M	5W	6E	6M	6W	7E	7M	7W
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	3477	542	75	2336	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	19
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NA[illegible]IDAE	-	-	-	-	-	-	-	-	-	19
TUBIFICIDAE										
[illegible]DAE	168	19	-	-	19	-	224	078	-	897
MISCELLANEOUS										
[illegible]AE NEW GENUS	-	299	19	-	-	-	-	-	-	-

AD-A123 446 WATER QUALITY MANAGEMENT STUDIES LAKE SEMINOLE FEBRUARY-DECEMBER 1979 PHASE II(U) WATER AND AIR RESEARCH INC GAINESVILLE FL DEC 82 ACF-80-11 7/8

UNCLASSIFIED DACW01-78-C-0101 F/G 8/8 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE J-8b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	4W	5C	5M	5W	6E	6M	6W	7E	7M	7W
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	56	336	75	299	748	187	75	93	112	37
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	374	37	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	206	-	112
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	37	-	56	19	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	-	-	-

TABLE J-8b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 4W	5E	5M	5W	6E	6M	6W	7E	7M	7W
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	19
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	37
LABRUNDINEA VIRESCENS	-	-	-	-	-	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	19	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	19	37	19	19	56	-	75
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	19	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	206	75	56	37	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	19	-	-	-
TANYTARSUS SP	19	-	-	-	-	-	-	19	-	19
XENOCHIRONOMUS SP	-	-	-	-	-	19	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	149	-	75
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	19	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-

TABLE J-8b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	4W	5E	5M	5W	6E	6M	6W	7E	7M	7W
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	243	4393	711	879	3233	225	337	1439	112	1309
NUMBER OF TAXA	3	7	4	6	7	3	4	8	1	10

TABLE J-8c

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 3 (6/4-6.1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	8E	8M	8W	9A	9B	9C	10A	10B	10C	11A
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	1607	149	149	004	19	56	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-8c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	8E	8M	8W	9A	9B	9C	10A	10B	10C	11A
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	131	131	-	93	19	37	19	37	19	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUNENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	19	-	-	19
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	19	-	37	-	-	19	-
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	19	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	19	19	-	131	131	149	112
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	-	-	-

TABLE J-8c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 8F	8M	8W	9A	9B	9C	10A	10B	10C	11A
CRYPTOCHIRONOMUS FULVUS	-	75	19	-	19	-	-	-	-	-
DICROTENDIPES NERVOSUS	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	37	-	-	-	-	-	-	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	75	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	19	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	37	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	200	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	56	56	168	112	75	112	56	355
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	19	19	-	19	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-

TABLE J-8c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 8E	8M	8W	9A	9B	9C	10A	10B	10C	11A
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	37	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	411	1981	261	336	1048	224	300	318	243	486
NUMBER OF TAXA	2	7	4	5	6	5	5	5	4	3

TABLE J-8d

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT D/CW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	11B	11C	12E	12M	12W	13A	13B	13C	14E	14M
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	112	37	75	168	206	187	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-8d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11B	11C	12E	12M	12W	13A	13B	13C	14E	14W
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	-	224	168	187	-	224	37	19	-
GYRAULUS SP	-	-	-	-	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	19	-	-	-	-	-	112	-	-	-
UNIONIDAE	-	-	-	-	19	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	56	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	19	19
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	19	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	168	168	-	-	-	75	75	19	56	75
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	-	-	-

TABLE J-8d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11D	11C	12E	12M	12W	13A	13B	13C	14E	14M
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	19	-	37	75	37	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	168	149	-	-	-	19	-	-	75	131
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	37	-	-	-	37	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	19	19	206	411	710	-	19
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NARPUS SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-

TABLE J-8d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11B	11C	12E	12M	12W	13A	13B	13C	14E	14W
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	355	336	392	261	412	505	1028	972	206	244
NUMBER OF TAXA	3	3	3	4	6	5	5	5	5	4

TABLE J-8e

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	14W	15A&B	15C	16E	16M	16W	17E	17M	17W	18E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	19	-	-	-	-	-
TURBELLARIA 3	-	-	-	-	-	-	-	097	430	19
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	19
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	37	-	-	-	-	19	-
TUBIFICIDAE										
TUBIFICIDAE	-	168	-	-	710	1477	206	56	-	1103
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	897	692	-

TABLE J-8e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 14W	15AGR	15C	16E	16M	16W	17T	17M	17W	18E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	159	56	-	56	1140	280	37	-	785
GYRAULUS SP	-	-	-	37	-	-	-	-	-	-
LAEVIPLEX SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
UNIONIDAE	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	19
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	37	-	-	-	-	-	-	-	-	-
ABLABESMYIA MALLOCHI	-	-	-	-	-	37	-	-	-	-
ABLABESMYIA TARELLA	-	-	-	-	19	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	37	-
CHIRONOMUS SP	-	56	19	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	37	-	-	19	-
COELOTANYPUS SP	75	28	37	-	19	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	93	-	-	19	-
NEAR CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
NEAR CORYNONEURA SP B	-	-	-	-	-	19	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	579	392	-
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	-	-	19	19	-

TABLE J-8e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 14W	15ACM	15C	16E	16M	16W	17E	17M	17W	18L
CRYPTOCHIRONOMUS FULVUS	-	9	-	-	19	19	-	-	56	-
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	-	-	-	-	19
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
HARNISCHIA SP	-	-	-	-	-	-	-	-	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-	19	19	-	-	-
NILOTHAUMA SP	-	-	-	-	19	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-	19	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	37	112	-	-	75	19
POLYPEDILUM SPP	-	-	-	19	-	-	-	-	-	-
PROCLADIUS SP	-	37	-	-	-	19	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-	75	19	355	56	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	19	-	-	-	-	-
TANYTARSUS SP	19	-	-	-	-	-	19	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	75	65	187	-	-	112	-	-	-	-
STENONEMA SP	-	-	-	-	-	56	149	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	19	-	-	-	-
CHAOBORUS SP	-	159	131	-	-	-	37	-	-	-
GOMPHUS SP	-	-	-	-	19	-	-	-	-	-
NARPUS SP	-	-	-	-	-	131	37	-	-	-
PODURA AQUATILA	-	-	-	-	-	19	-	-	-	-

TABLE J-8e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 14W	15AGR	15C	16E	16M	16W	17E	17M	17W	18L
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	75	19	-
TOTAL NUMBER OF ORGANISMS	206	681	430	93	936	3403	766	2915	1833	1983
NUMBER OF TAXA	4	8	5	3	10	17	8	8	12	7

TABLE J-8f

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 3 (6/4-6,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	18M	18W	19E	19M	19W	DATA				
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	19	19	-	-	-	*******	*******	*******	*******	*******
TURBELLARIA B	56	-	-	579	-	*******	*******	*******	*******	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	*******	*******	*******	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	168	19	-	19	-	*******	*******	*******	*******	*******
TUBIFICIDAE										
TUBIFICIDAE	37	-	-	56	878	*******	*******	*******	*******	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	*******	*******	*******	*******	*******

TABLE J-8f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18M	18W	19E	19M	19W	******	******	******	******	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	785	299	2056	1047	2112	********	********	********	********	********
GYRAULUS SP	-	-	-	-	-	********	********	********	********	********
LAEVIPLEX SP	-	-	-	-	-	********	********	********	********	********
BIVALVIA										
EUPERA CUBENSIS	19	-	-	-	-	********	********	********	********	********
SPHAERIUM SP	-	-	-	-	-	********	********	********	********	********
UNIONIDAE	-	-	-	-	-	********	********	********	********	********
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	********	********	********	********	********
HYALELLA AZTECA	-	-	-	-	-	********	********	********	********	********
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	********	********	********	********	********
ABLABESMYIA MALLOCHI	-	-	-	-	-	********	********	********	********	********
ABLABESMYIA TARELLA	-	-	-	-	-	********	********	********	********	********
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	********	********	********	********	********
CHIRONOMUS SP	-	-	-	-	-	********	********	********	********	********
CLADOTANYTARSUS SP	-	-	-	-	-	********	********	********	********	********
COELOTANYPUS SP	-	-	-	-	-	********	********	********	********	********
CORYNONEURA SP	-	-	-	-	-	********	********	********	********	********
NEAR CORYNONEURA SP	-	-	-	-	-	********	********	********	********	********
NEAR CORYNONEURA SP B	-	-	-	-	-	********	********	********	********	********
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	********	********	********	********	********
"CRYPTOCHIRONOMUS" CF ROLLI SP B	-	-	-	-	-	********	********	********	********	********
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	********	********	********	********	********
DICROTENDIPES NEOMODESTUS	-	-	-	-	-	********	********	********	********	********
GLYPTOTENDIPES SP	-	19	-	-	-	********	********	********	********	********

TABLE J-8f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 18M	18W	19F	19M	19W
HARNISCHIA SP	-	-	-	-	-
LABRUNDINEA VIRESCENS	-	-	-	-	-
NILOTHAUMA SP	-	-	-	-	-
PARALAUTERBORNIELLA NIGROHALTERALIS	-	-	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-
POLYPEDILUM HALTERALE	-	93	-	93	-
POLYPEDILUM SPP	-	-	131	-	-
PROCLADIUS SP	-	-	-	-	-
PSECTROCLADIUS SP	19	-	-	-	-
RHEOTANYTARSUS SP	56	37	37	75	-
ROBACKIA DEMIJERA	-	-	-	19	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-
EPHEMEROPTERA					
HEXAGENIA SP	-	-	-	-	-
STENONEMA SP	-	-	17	-	-
TRICORYTHODES ALBILINEATUS	-	-	56	-	19
TRICOPTERA					
NEURECLIPISIS SP	-	-	-	-	-
POTAMYIA FLAVA	19	37	991	-	-
MISCELLANEOUS INSECTA					
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-
NARPUS SP	-	-	-	-	-
PODURA AQUATILA	-	-	19	-	-

TABLE J-8f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18M	18W	19E	19N	19S	******	******	******	******	******
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	19	-	*******	*******	*******	*******	*******
TOTAL NUMBER OF ORGANISMS	1178	523	3309	1907	3009	******	******	******	******	******
NUMBER OF TAXA	9	7	7	8	3	******	******	******	******	******

TABLE J-9a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	19	56	112	93	168	-	299	1383	-	336
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	37	-	-	-	19	37	673	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	37	19	37	37	37	-	19	-	-	56
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
VIVIPARUS SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	19	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	19	206	-	19	19	-	37	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES LOBUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1E	1M	1W	2E	2M	2W	3E	3M	3W	4E
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	19	-	-	-	-	-	-	37	75
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	37	75	168	19	131	-	75	93	-	19
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYPUS STELLATUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	19	-	-	19	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-9b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS: 4M	4W	5E	5M	5W	6E	6M	6W	7E	7M
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	19	56	654	2056	710	37	19	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	19	-	56	-	149	449	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	-	-	-	729	1776	2486
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	19
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	37	19	19	112	149	75	56	37	19	93
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
VIVIPARUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-9b (cont.)

TAXONOMIC CLASSIFICATION	4M	4W	5E	5M	5W	6E	6M	6W	7E	7M
	NUMBER OF ORGANISMS AT STATION:									
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	75	-
NEAR CHERNOVSKIIA ORBICUS	37	19	19	-	56	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	19	19	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	19	37	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	112
DICROTENDIPES LOBUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	131	-	-	56	19	56	19	-	-	19
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	56	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	19	56	112	112	19	-	19	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	56
TANYPUS STELLATUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	19	-

TABLE J-9b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 4M	4W	5E	5M	5W	6E	6M	6W	7E	7M
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	-	-	411	-
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	19	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	243	150	823	2355	972	261	113	934	2824	2785
NUMBER OF TAXA	5	4	5	5	6	5	4	4	8	6

TABLE J-9c

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	112	93	19	635	19	19	93	93	-	131
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	7W	8C	8M	8W	9A	9B	9C	10A	10B	10C
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	93	93	131	112	112	-	37	56	19	149
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	-
VIVIPARUS SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	19	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	75
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	56	56	-	131	37	-	-	37	37
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	56	56	93	-	93	19
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	-	-	37	-	-	-	-	-	-
DICROTENDIPES LOBUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 7W	8E	8M	8W	9A	9B	9C	10A	10B	10C
POLYPEDILUM HALTERALE	-	-	-	37	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	19	-	-	-	-	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYPUS STELLATUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	169	-	56	131	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	-	56	168	37	206	131	56	19	37	56
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	19	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	-	-	19	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	37	-	19
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	37	-	-	-	-	-	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-9c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	7W	8C	8M	8W	9A	9B	9C	10A	10B	10C
TOTAL NUMBER OF ORGANISMS	130	207	523	168	393	56	1066	1513	37	486
NUMBER OF TAXA	4	6	4	4	6	2	4	3	1	4

TABLE J-9d

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 11A	11B	11C	12E	12M	12W	13A	13B	13C	14E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	19	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	75	112	56	953	2056	878	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9d (cont.)

TAXONOMIC CLASSIFICATION	11A	11D	11C	12E	12N	12W	13A	13H	13C	14E
	NUMBER OF ORGANISMS AT STATION:									
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	-	19	37	149	224	37	93	75	-
GONIOBASIS SP	-	-	-	-	-	-	-	-	-	75
VIVPARUS SP	-	-	-	-	-	-	-	-	-	-
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	19	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	19	-	19	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	-	-	-	-	-	-	-	-	-	19
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	168	37	112	-	-	19	-	-	-	93
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	19	-
DICROTENDIPES LOBUS	-	-	-	-	-	-	19	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	19
EPOICOCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	-	-

TABLE J-9d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 11A	11D	11C	12E	12M	12W	13A	13M	13C	14E
POLYPEDILUM HALTERALE	-	-	-	-	-	-	19	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	75	-	56	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERA	-	-	-	-	-		-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYPUS STELLATUS	-	-	37	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
HEXAGENIA SP	19	-	-	-	-	19	56	56	19	149
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPSIS SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	37	-	-	-	-	-	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	19	19	19	-	-	-	935	262	617	19
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
NEMATODA	19	-	-	-	-	-	-	-	-	-

TABLE J-9d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	11A	11D	11C	12C	12M	12W	13A	13B	13C	14E
TOTAL NUMBER OF ORGANISMS	411	317	436	909	524	243	279	205	205	486
NUMBER OF TAXA	5	5	7	6	5	4	4	4	5	7

TABLE J-9e

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	56	-	-
TURBELLARIA B	-	-	-	-	-	-	56	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	561	-	654	56	411	224	-	19
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	37	-	-	-
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	19	19	131	56	168	1346	1178	374	-	710
GONIOBASIS SP	19	19	-	-	-	-	-	-	-	-
VIVIPARUS SP	-	19	-	-	-	-	-	-	-	-

TABLE J-9e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
SPHAERIUM SP	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA CINCTIPES	75	-	37	56	37	-	-	19	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	37	19	56	-	-	-	-	-
CLADOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	37
COELOTANYPUS SP	75	37	56	56	37	-	19	75	-	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	-	-
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	75	-	-	-	37	-	-	19
DICROTENDIPES LOBUS	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	19	-	-	-	-	-	-	-	-
EPOICOCLADIUS SP	-	-	-	19	-	-	-	-	-	-
PARACHIRONOMUS MONOCHROMUS	-	19	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	19	56	37	56	-	19	-	-	-
RHEOTANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
ROBACKIA DEMEIJERIA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYPUS STELLATUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	19	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-9e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15B	15C	16E	16M	16W	17M	17W
EPHEMEROPTERA										
HEXAGENIA SP	243	75	93	187	131	-	37	-	-	19
TRICORYTHODES ALBILINEATUS	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
NEURECLIPISIS SP	-	19	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	-	-	-	-	-	19	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	19	-	-	-
CHAOBORUS SP	19	19	392	748	224	-	112	19	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
STENELMIS SP	-	-	-	-	-	-	-	-	-	19
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	19	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	450	283	1431	1179	1392	1402	1944	767	0	823
NUMBER OF TAXA	6	11	9	8	9	2	11	6	0	6

TABLE J-9e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	14M	14W	15A	15M	15C	16E	16M	16W	17M	17W
TOTAL NUMBER OF ORGANISMS	225	93	206	131	261	337	2113	2467	1664	374
NUMBER OF TAXA	4	3	5	3	2	5	8	4	6	6

TABLE J-9f

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 5 (8/13-16,1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18E	18M	18W	19E	19M	19W	******	******	******	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	449	2392	9963	1103	748	131	*******	*******	*******	*******
TURBELLARIA B	-	-	-	-	-	-	*******	*******	*******	*******
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	19	19	-	*******	*******	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	318	-	1701	-	*******	*******	*******	*******
TUBIFICIDAE										
TUBIFICIDAE	449	-	-	505	37	19	*******	*******	*******	*******
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	*******	*******	*******	*******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	617	785	1094	2673	2542	5906	*******	*******	*******	*******
GONIOBASIS SP	-	19	-	-	-	-	*******	*******	*******	*******
VIVIPARUS SP	-	-	-	-	-	-	*******	*******	*******	*******

TABLE J-9f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18E	18M	18W	19E	19M	19W	******	******	******	******
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	********	********	********	********
SPHAERIUM SP	-	-	-	-	-	-	********	********	********	********
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	********	********	********	********
ARTHROPODA-INSECTA										
CH[illegible]ONOMIDAE										
ABLABESMYI[illegible]TIPES	-	-	-	-	-	-	********	********	********	********
NEAR CH[illegible]IA ORBICUS	-	-	-	-	-	-	********	********	********	********
CHIRONOMUS	-	-	-	-	-	-	********	********	********	********
CLADOTANYTARSUS SP	-	-	-	-	-	-	********	********	********	********
COELOTANYPUS SP	-	-	-	-	-	-	********	********	********	********
CORYNONEURA SP	-	-	-	-	19	-	********	********	********	********
"CRYPTOCHIRONOMUS" CF ROLLI	-	-	-	-	-	-	********	********	********	********
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	********	********	********	********
DICROTENDIPES LOBUS	-	-	-	-	-	-	********	********	********	********
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	********	********	********	********
EPOICOCLADIUS SP	-	-	-	-	-	-	********	********	********	********
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	********	********	********	********
POLYPEDILUM HALTERALE	-	-	-	-	-	-	********	********	********	********
POLYPEDILUM SP	37	168	392	-	93	-	********	********	********	********
PROCLADIUS SP	-	-	-	-	-	-	********	********	********	********
RHEOTANYTARSUS SP	-	19	19	-	37	-	********	********	********	********
RUBACKIA DEMIJERA	-	-	-	-	-	-	********	********	********	********
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	********	********	********	********
TANYPUS STELLATUS	-	-	-	-	-	-	********	********	********	********
TANYTARSUS SP	-	-	-	-	-	-	********	********	********	********
XENOCHIRONOMUS SP	-	-	-	-	-	-	********	********	********	********

TABLE J-9f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	18E	18M	18W	19E	19M	19W	******	******	******	******
EPHEMEROPTERA										
HEXAGENIA SP	-	-	-	-	-	-	*******	*******	*******	*******
TRICORYTHODES ALBILINEATUS	-	93	280	-	37	-	*******	*******	*******	*******
TRICOPTERA										
NEURECLIPISIS SP	-	37	-	-	19	-	*******	*******	*******	*******
OECETIS SP	-	19	19	-	-	-	*******	*******	*******	*******
POTAMYIA FLAVA	19	2000	1383	-	187	37	*******	*******	*******	*******
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	*******	*******	*******	*******
CHAOBORUS SP	19	-	-	19	-	-	*******	*******	*******	*******
EMPIDIDAE (NO LARVAL KEY)	-	-	37	-	-	-	*******	*******	*******	*******
GOMPHUS SP	-	-	-	-	-	-	*******	*******	*******	*******
STENELMIS SP	-	-	-	-	-	-	*******	*******	*******	*******
MISCELLANEOUS INVERTEBRATES										
NEMATODA	-	-	-	-	-	-	*******	*******	*******	*******
TOTAL NUMBER OF ORGANISMS	1590	5532	13495	4319	5439	6093	******	******	******	******
NUMBER OF TAXA	6	9	9	5	11	4	******	******	******	******

TABLE J-10a

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	1M	1W	2E	2W	3E	3M	3W	4E	4M	5E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	37	-	-	-	-	-	-	-	-	-
TURBELLARIA D	-	1607	-	-	37	1028	-	19	748	598
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	-	-	-	19	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	75	-	-	-	-	-	-	-
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	19	-	-
LUMBRICULIDAE	-	-	-	-	-	-	-	-	-	-

TABLE J-10a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	1N	1W	2E	2W	3E	3W	1W	4E	4W	5E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	19	1551	187	187	-	467	112	392	19	355
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	37	-	19	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	19	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-10a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	1M	1W	2C	2E	3E	3M	3W	4P	4M	5E
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	75	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
TRIBELOS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
CLOEON SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	-	-	-	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
PHYLOCENTROPUS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-10a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	1M	1W	2E	2W	3E	3W	1W	4E	4W	[illegible]
TOTAL NUMBER OF ORGANISMS	75	3158	262	107	37	1495	149	449	861	953
NUMBER OF TAXA	3	2	2	1	1	2	2	4	4	2

TABLE J-10b

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	6E	6M	6W	7E	7M	7W	8E	8M	8W	9A
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA D	-	-	107	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	19	168	56	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	1346	-	-	411	766	187	168	56	168	56
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	56	-	-	-	-	-	-	-
LUMBRICULIDAE	-	-	-	-	-	-	-	-	-	-

TABLE J-10b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 6P	6M	6W	7E	7M	7W	8C	8M	8W	9A
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	37	336	75	19	5	-	37	19	-	56
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	37	-	-	56	-	-	-	19	-	37
NEAR CHERNOVSKIIA ORRICUS	-	56	112	-	-	-	-	-	-	-
CHIRONOMUS SP	56	-	-	93	-	-	168	19	692	280
COELOTANYPUS SP	-	-	-	37	-	-	-	-	-	19
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	75	-	-	75	19	-	37	-	37	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	19	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	19	-	75	-	-	-	-	56	131
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-10b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	6F	6M	6W	7E	7M	7W	8C	8M	8W	9A
ROBACKIA DEMIJERA	-	37	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	37	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
TRIBELOS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	224	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
CLOEON SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	112	-	-	1039	-	206	131	149	112	804
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
PHYLOCENTROPUS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	37	-	-	19	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	19	19	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-10b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	6E	6M	6W	7E	7M	7W	8E	8M	8W	9A
TOTAL NUMBER OF ORGANISMS	1737	448	449	1962	916	393	579	505	1065	1383
NUMBER OF TAXA	8	4	5	10	4	2	7	7	5	7

TABLE J-10c

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II, CYCLE 7 (10/3-7/1979)
*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	9B	9C	10A	10B	10C	11A	11B	11C	12E	12M
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	75
TURBELLARIA 3	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	19
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	19	37	-	-	-	9	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	131	617	56	149	37	9	299	561	93	112
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-
LUMBRICULIDAE	-	-	-	-	-	-	-	-	-	-

TABLE J-10c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	9B	9C	10A	10B	10C	11A	11B	11C	12B	12M
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	243	37	243	19	-	579	206	-	187
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	-	-	-	-	-	-	-	19	374	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	56	19	19	37	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	56
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	37	-	-	19	-	9	-	37	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	19	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	-	-	-	56	37	19	-	19	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-10c (cont.)

TAXONOMIC CLASSIFICATION	9D	9C	10A	10B	10C	11A	11B	11C	12E	12M
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	19	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
TRIBELOS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
CLOEON SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	93	-	56	131	56	47	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	19	-
PHYLOCENTROPUS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	-	-	-	-	9	-	-	75	-
DIDYMOPS TRANSVERSA	19	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	19	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	19	-	-	-

The column heading "NUMBER OF ORGANISMS AT STATION:" spans the station columns.

TABLE J-10c (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	9B	9C	10A	10B	10C	11A	11B	11C	12F	12H
TOTAL NUMBER OF ORGANISMS	299	897	205	617	168	139	897	861	599	449
NUMBER OF TAXA	5	3	4	6	5	7	3	6	6	5

TABLE J-10d

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	12W	13A	13B	13C	14E	14M	14W	15A	15B	15C
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	19	-	-	-	19	-	19	-	-	-
TURBELLARIA B	-	-	-	-	-	-	-	-	-	-
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	-	-	37	-	-	-	-	56
TUBIFICIDAE										
TUBIFICIDAE	56	1327	1159	1757	-	-	37	374	710	785
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	-	-	-	-	-	-	-	-
LUMBRICULIDAE	-	-	-	-	-	-	-	-	-	-

TABLE J-10d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13W	13A	13B	13C	14C	14M	14W	15A	15B	15C
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	112	1776	430	1776	-	37	19	486	299	542
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	19
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	-
HYALELLA AZTECA	1308	-	-	-	-	-	37	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	37	19	19	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	112	56	37	75	-	-	-	-	-
COELOTANYPUS SP	-	37	56	-	19	-	56	-	-	-
CRICOTOPUS SP	-	-	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	19	37	-	19	56	-	37	19	37	37
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
EINFELDIA NATCHITOCHEA	19	-	-	-	-	-	75	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	-	-	-	-	-
PROCLADIUS SP	56	19	37	112	-	75	-	-	-	56
PSEUDOCHIRONOMUS SP	19	-	-	-	-	-	-	-	-	-

TABLE J-10d (cont.)

TAXONOMIC CLASSIFICATION	13M	13A	13B	13C	14C	14M	14B	15A	15B	15C
ROBACKIA DEMIJERA	-	-	-	-	-	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	-	-	-	-	-
TANYTARSUS SP	-	19	-	-	-	-	-	-	-	-
TRIBELOS SP	-	-	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	19	-	19	-	-	-
CLOEON SP	-	-	-	-	19	-	-	-	-	-
HEXAGENIA SP	-	56	37	37	635	107	916	19	56	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	-	-	-
OECETIS SP	-	56	19	93	-	-	-	-	-	-
PHYLOCENTROPUS SP	-	-	-	-	75	19	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
CHAOBORUS SP	-	19	-	37	-	131	-	19	19	-
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NEUROCORDULIA SP	19	-	-	-	-	-	19	-	-	-
PODURA AQUATILA	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	-	19	-	-	-	-	-	37
NEMATODA	-	-	-	-	-	19	-	-	-	-

TABLE J-10d (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	13W	13A	13B	13C	14C	14M	14W	15A	15B	15C
TOTAL NUMBER OF ORGANISMS	1627	3458	1794	3887	991	487	1253	917	1121	1532
NUMBER OF TAXA	9	10	7	9	10	7	11	5	5	7

TABLE J-10e

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	16E	16M	16W	17E	17M	17W	18E	18M	18W	19E
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	19	-	-	-	727	505	467	878
TURBELLARIA B	-	206	-	-	822	-	-	-	-	37
ANNELIDA-HIRUDINEA										
HIRUDINEA	-	-	37	-	-	-	112	19	37	75
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	355	-	75	841	-	-	19	37	-
TUBIFICIDAE										
TUBIFICIDAE	206	243	131	280	-	-	-	-	-	224
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	37	-	-	3140	-	-	-	-	-
LUMBRICULIDAE	-	-	-	19	-	-	-	-	-	-

TABLE J-10e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	16E	16M	16W	17E	17M	17W	18E	18M	18W	19E
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	1121	1682	56	149	2131	206	2785	972	748	2579
BIVALVIA										
EUPERA CUBENSIS	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	19	-	-
HYALELLA AZTECA	-	-	19	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	-	-	-	-	-	-	-	-
NEAR CHERNOVSKIIA ORBICUS	-	-	-	-	-	-	-	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
COELOTANYPUS SP	-	-	-	-	-	-	-	-	-	-
CRICOTOPUS SP	-	19	-	-	-	-	-	-	-	-
CRYPTOCHIRONOMUS FULVUS	-	-	-	-	-	-	-	-	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	19
EINFELDIA NATCHITOCHEA	-	-	-	-	-	-	-	-	-	-
GLYPTOTENDIPES SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM HALTERALE	-	-	-	-	-	56	-	-	-	-
PROCLADIUS SP	19	-	56	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-

TABLE J-10e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	16E	16M	16W	17E	17M	17W	18E	18M	18W	19E
ROBACKIA DEMIJERA	-	-	-	-	93	-	-	-	-	-
STICTOCHIRONOMUS DEVINCTUS	-	-	-	-	-	56	-	-	-	-
TANYTARSUS SP	-	-	-	-	-	-	-	-	-	-
TRIBELOS SP	-	187	-	-	-	-	-	-	-	-
XENOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
UNIDENTIFIED TANYPODINAE	-	-	-	-	19	-	-	-	-	-
EPHEMEROPTERA										
CAENIS SP	-	-	-	-	-	-	-	-	-	-
[illegible] SP	-	-	-	-	-	-	-	-	-	-
HEXAGENIA SP	37	-	430	-	-	-	-	-	-	-
STENONEMA SP	-	-	-	-	-	-	-	-	-	131
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	-	-	-	-	-	19	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
PHYLOCENTROPUS SP	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	19	-	-	-	37	93	-	-	-	19
CHAOBORUS SP	-	-	-	-	-	-	-	-	-	-
DIDYMOPS TRANSVERSA	-	-	-	-	-	-	-	-	-	-
GOMPHUS SP	-	-	-	-	-	-	-	-	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	-	-
PODURA AQUATILA	-	-	-	-	19	-	-	-	-	-
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	19	-	-	-	-	-	-	-
NEMATODA	-	-	-	-	-	-	-	-	-	-

TABLE J-10e (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	16E	16M	16W	17E	17M	17W	18E	18M	18W	19E
TOTAL NUMBER OF ORGANISMS	1402	2729	767	523	7102	411	3626	1553	1289	3962
NUMBER OF TAXA	5	7	8	4	8	4	3	6	4	8

TABLE J-10f

LAKE SEMINOLE WQ MANAGEMENT STUDY - BENTHIC MACROINVERTEBRATES (ORGANISMS/SQ M)

CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II. CYCLE 7 (10/3-7/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION									
	19M	19W	DATA							
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	2942	56	********	********	********	********	********	********	********	********
TURBELLARIA D	-	-	********	********	********	********	********	********	********	********
ANNELIDA-HIRUDINEA										
HIRUDINEA	93	37	********	********	********	********	********	********	********	********
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	2036	-	********	********	********	********	********	********	********	********
TUBIFICIDAE										
TUBIFICIDAE	19	37	********	********	********	********	********	********	********	********
MISCELLANEOUS										
ENCHYTRAEIDAE NEW GENUS	-	-	********	********	********	********	********	********	********	********
LUMBRICULIDAE	-	-	********	********	********	********	********	********	********	********

TABLE J-10f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	19M	19W	******	******	******	******	******	******	******	******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	3477	1906	*******	*******	*******	*******	*******	*******	*******	*******
BIVALVIA										
EUPERA CUBENSIS	-	-	*******	*******	*******	*******	*******	*******	*******	*******
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
HYALELLA AZTECA	-	-	*******	*******	*******	*******	*******	*******	*******	*******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA ANNULATA	-	-	*******	*******	*******	*******	*******	*******	*******	*******
NEAR CHERNOVSKIIA ORBICUS	-	-	*******	*******	*******	*******	*******	*******	*******	*******
CHIRONOMUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
COELOTANYPUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
CRICOTOPUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
CRYPTOCHIRONOMUS FULVUS	-	-	*******	*******	*******	*******	*******	*******	*******	*******
CRYPTOCLADOPELMA SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
EINFELDIA NATCHITOCHEA	-	-	*******	*******	*******	*******	*******	*******	*******	*******
GLYPTOTENDIPES SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
POLYPEDILUM HALTERALE	-	-	*******	*******	*******	*******	*******	*******	*******	*******
PROCLADIUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******
PSEUDOCHIRONOMUS SP	-	-	*******	*******	*******	*******	*******	*******	*******	*******

TABLE J-10f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS 19N	19W	******	******	******	******	******	******	******	******
RODACKIA DEMIJERA	-	-	********	********	********	********	********	********	********	********
STICTOCHIRONOMUS DEVINCTUS	-	-	********	********	********	********	********	********	********	********
TANYTARSUS SP	-	-	********	********	********	********	********	********	********	********
TRIBELOS SP	-	-	********	********	********	********	********	********	********	********
XENOCHIRONOMUS SP	-	-	********	********	********	********	********	********	********	********
UNIDENTIFIED TANYPODINAE	-	-	********	********	********	********	********	********	********	********
EPHEMEROPTERA										
CAENIS SP	-	19	********	********	********	********	********	********	********	********
CLOEON SP	-	-	********	********	********	********	********	********	********	********
HEXAGENIA SP	-	-	********	********	********	********	********	********	********	********
STENONEMA SP	-	-	********	********	********	********	********	********	********	********
TRICOPTERA										
CHEUMATOPSYCHE SP	-	-	********	********	********	********	********	********	********	********
OECETIS SP	-	-	********	********	********	********	********	********	********	********
PHYLOCENTROPUS SP	-	-	********	********	********	********	********	********	********	********
MISCELLANEOUS INSECTA										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	********	********	********	********	********	********	********	********
CHAOBORUS SP	-	-	********	********	********	********	********	********	********	********
DIDYMOPS TRANSVERSA	-	-	********	********	********	********	********	********	********	********
GOMPHUS SP	-	-	********	********	********	********	********	********	********	********
NEUROCORDULIA SP	-	-	********	********	********	********	********	********	********	********
PODURA AQUATILA	-	-	********	********	********	********	********	********	********	********
MISCELLANEOUS INVERTEBRATES										
ACARI	-	-	********	********	********	********	********	********	********	********
NEMATODA	-	-	********	********	********	********	********	********	********	********

TABLE J-10f (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	19M	19W	******	******	******	******	******	******	******	******
TOTAL NUMBER OF ORGANISMS	8187	2055	******	******	******	******	******	******	******	******
NUMBER OF TAXA	5	5	******	******	******	******	******	******	******	******

TABLE J-11a

L SEMINOLE WQ MGMNT STUDY - HESTER DENDY MACROINVERTEBRATES (ORGANISMS/SQ M)

PLACED CYCLE 1 (2/19-22/1979) - RETRIEVED CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	9	13	14
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	8
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	8	-	-	16	48	182	111	1127	279	198
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	8	-	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	-	-	-	-	-	16
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	182

TABLE J-11a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	9	13	14
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA MALLOCHI	-	-	-	-	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	-	-	-	-	8	8	-
ABLABESMYIA TARELLA	-	-	-	-	-	-	-	-	-	-
BRILLIA PAR	32	24	8	32	32	24	32	-	-	-
CHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
CONCHAPELOPIA SP	-	-	-	-	-	-	-	-	71	-
CORYNONEURA SP	-	-	-	-	-	-	-	-	16	32
CRICOTOPUS SPP	540	619	548	1357	1976	1667	778	968	3214	16
DICROTENDIPES NEOMODESTUS	8	8	-	-	-	8	24	-	103	8
DICROTENDIPES NERVOSUS	-	40	-	16	24	-	40	182	48	-
EUKIEFFERIELLA CAERULESCENS	-	-	-	-	-	-	-	-	-	-
EUKIEFFERIELLA SP	8	8	-	8	40	24	-	-	-	-
GLYPTOTENDIPES SP	71	40	-	16	16	16	40	32	24	-
LABRUNDINIA NEOPILOSELLA	-	-	-	-	-	-	-	-	5	-
LARSIA SP	-	-	-	-	-	-	-	-	24	8
MICROPSECTRA SP	8	16	8	-	-	8	24	-	16	8
PARACHIRONOMUS CARINATUS	-	-	-	-	-	-	-	-	8	-
PARACHIRONOMUS MONOCHROMUS	-	-	-	-	-	-	-	-	16	-
PARAMETRIOCNEMUS SP	8	24	-	8	-	-	8	-	-	-
PARATENDIPES SUBAEQUALIS	-	-	-	-	-	8	-	-	-	-
POLYPEDILUM FALLAX	40	48	-	24	24	-	48	-	-	-
POLYPEDILUM HALTERALE	-	-	-	8	8	8	-	8	-	-
POLYPEDILUM SPP	95	87	32	63	103	79	56	24	5	8
PROCLADIUS SP	-	-	-	-	-	-	-	-	-	-
PSEUDOCHIRONOMUS SP	-	-	-	-	-	-	-	-	-	-
RHEOCRICOTOPUS ROBACKI	-	8	-	-	-	8	-	-	-	-
RHEOTANYTARSUS SP	8	24	-	8	32	71	-	40	205	48
SMITTIA ATERRIMA	-	-	-	-	-	32	-	-	-	-
TENDIPEDINI SP A ROBACK 1953	-	-	-	-	-	-	-	-	-	-
THIENEMANNIELLA SP	-	-	-	-	-	-	-	-	32	-
THIENEMANNIELLA XENA	87	79	111	159	317	341	24	40	294	-

TABLE J-11a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	9	13	14
EPHEMEROPTERA										
BAETIS SP	-	-	-	-	-	-	-	-	-	16
CAPNIS SP	-	-	-	-	-	-	-	16	-	-
CF CINYGMA SP	-	-	-	-	-	-	-	-	-	-
CLOEON SP	16	-	-	-	-	-	-	-	-	-
PSEUDOCLOEON SP	-	-	-	-	-	-	-	-	-	-
STENACRON SP	-	-	-	-	-	-	-	-	-	8
STENONEMA SP	-	-	-	-	8	-	-	-	8	230
TRICOPTERA										
CHIMARRA SP	-	-	-	-	-	-	-	-	-	-
NEURECLIPSIS SP	-	-	-	-	-	-	119	9	48	24
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	-	16	-	-	-	-	-	-	-	-
UNIDENTIFIED TRICOPTERA	8	8	-	-	-	8	-	-	-	-
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	-	-	16	-	8	-
DOLICHOPODIDAE (NO LARVAL KEY)	-	-	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	8	-	8	-	8	-	-	-	-
ENALLAGMA SP	-	-	-	-	-	-	-	-	-	8
NARPUS SP	-	-	-	-	-	-	-	-	-	-
NEUROCORDULIA SP	-	-	-	-	-	-	-	-	-	8
PERLESTA SP	-	8	-	-	-	-	-	-	-	-
SIMULIUM SP	24	8	-	-	-	-	-	-	-	-
UNIDENTIFIED COLEOPTERA	-	-	-	8	-	-	-	-	-	-
UNIDENTIFIED INSECTA A	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	961	1081	707	1731	2628	2492	1320	2453	4430	826
NUMBER OF TAXA	15	19	5	14	12	16	13	11	20	17

TABLE J-11b

L SEMINOLE WQ MGMNT STUDY - HESTER DENDY MACROINVERTEBRATES (ORGANISMS/SQ M)

PLACED CYCLE 1 (2/19-22/1979) - RETRIEVED CYCLE 2 (4/2-4/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION:									
	15	16	18	19	******	******	******	******	******	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	*******	*******	*******	*******	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	103	24	40	-	*******	*******	*******	*******	*******	*******
MOLLUSCA										
GASTROPODA										
CORBICULA MANILENSIS	-	-	-	-	*******	*******	*******	*******	*******	*******
ARTHROPODA-CRUSTACEA										
ASELLUS SP	-	-	-	-	*******	*******	*******	*******	*******	*******
HYALELLA AZTECA	16	-	-	-	*******	*******	*******	*******	*******	*******

TABLE J-11b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 15	16	18	19	******	******	******	******	******	******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA MALLOCHI	8	-	-	-	********	********	********	********	********	********
ABLABESMYIA PARAJANTA	8	-	-	-	********	********	********	********	********	********
ABLABESMYIA TARELLA	-	8	-	-	********	********	********	********	********	********
BRILLIA PAR	-	-	-	-	********	********	********	********	********	********
CHIRONOMUS SP	-	-	-	8	********	********	********	********	********	********
CONCHAPELOPIA SP	32	103	-	-	********	********	********	********	********	********
CORYNONEURA SP	56	135	-	-	********	********	********	********	********	********
CRICOTOPUS SPP	4357	3095	1270	2048	********	********	********	********	********	********
DICROTENDIPES NEOMODESTUS	16	-	8	8	********	********	********	********	********	********
DICROTENDIPES NERVOSUS	32	-	56	8	********	********	********	********	********	********
EUKIEFFERIELLA CAERULESCENS	-	71	-	-	********	********	********	********	********	********
EUKIEFFERIELLA SP	-	-	16	8	********	********	********	********	********	********
GLYPTOTENDIPES SP	24	-	8	-	********	********	********	********	********	********
LABRUNDINIA NEOPILOSELLA	-	40	-	-	********	********	********	********	********	********
LARSIA SP	-	-	-	-	********	********	********	********	********	********
MICROPSECTRA SP	24	32	8	-	********	********	********	********	********	********
PARACHIRONOMUS CARINATUS	-	-	-	-	********	********	********	********	********	********
PARACHIRONOMUS MONOCHROMUS	8	-	-	-	********	********	********	********	********	********
PARAMETRIOCNEMUS SP	-	-	-	-	********	********	********	********	********	********
PARATENDIPES SUBAEQUALIS	-	-	-	-	********	********	********	********	********	********
POLYPEDILUM FALLAX	-	-	-	8	********	********	********	********	********	********
POLYPEDILUM HALTERALE	32	8	48	24	********	********	********	********	********	********
POLYPEDILUM SPP	56	143	16	-	********	********	********	********	********	********
PROCLADIUS SP	-	-	-	8	********	********	********	********	********	********
PSEUDOCHIRONOMUS SP	-	16	-	-	********	********	********	********	********	********
RHEOCRICOTOPUS ROBACKI	-	-	-	-	********	********	********	********	********	********
RHEOTANYTARSUS SP	317	794	16	16	********	********	********	********	********	********
SMITTIA ATERRIMA	-	-	-	-	********	********	********	********	********	********
STENOTIPLOINI SP AM ROBACK 1953	-	16	-	-	********	********	********	********	********	********
THIENEMANNIELLA SP	-	-	-	-	********	********	********	********	********	********
THIENEMANNIELLA XENA	929	1143	40	48	********	********	********	********	********	********

TABLE J-11b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 15	16	18	19	******	******	******	******	******	******
EPHEMEROPTERA										
BAETIS SP	24	16	-	-	*******	*******	*******	*******	*******	*******
CAENIS SP	-	-	-	-	*******	*******	*******	*******	*******	*******
CF CINYGMA SP	-	24	-	-	*******	*******	*******	*******	*******	*******
CLOEON SP	-	-	-	-	*******	*******	*******	*******	*******	*******
PSEUDOCLOEON SP	-	-	-	-	*******	*******	*******	*******	*******	*******
STENACRON SP	-	16	-	-	*******	*******	*******	*******	*******	*******
STENONEMA SP	63	71	-	-	*******	*******	*******	*******	*******	*******
TRICOPTERA										
CHIMARRA SP	-	8	-	-	*******	*******	*******	*******	*******	*******
NEURECLIPSIS SP	32	24	8	-	*******	*******	*******	*******	*******	*******
OECETIS SP	-	-	-	8	*******	*******	*******	*******	*******	*******
POTAMYIA FLAVA	-	87	16	63	*******	*******	*******	*******	*******	*******
UNIDENTIFIED TRICOPTERA	8	24	8	8	*******	*******	*******	*******	*******	*******
MISCELLANEOUS										
CERATOPOGONIDAE (NO LARVAL KEY)	-	-	-	-	*******	*******	*******	*******	*******	*******
DOLICHOPODIDAE (NO LARVAL KEY)	-	8	-	8	*******	*******	*******	*******	*******	*******
EMPIDIDAE (NO LARVAL KEY)	-	-	-	-	*******	*******	*******	*******	*******	*******
ENALLAGMA SP	-	-	-	-	*******	*******	*******	*******	*******	*******
NARPUS SP	-	32	-	-	*******	*******	*******	*******	*******	*******
NEUROCORDULIA SP	-	-	-	-	*******	*******	*******	*******	*******	*******
PERLESTA SP	8	24	-	-	*******	*******	*******	*******	*******	*******
SIMULIUM SP	-	8	32	48	*******	*******	*******	*******	*******	*******
UNIDENTIFIED COLEOPTERA	-	-	-	-	*******	*******	*******	*******	*******	*******
UNIDENTIFIED INSECTA A	-	8	-	-	*******	*******	*******	*******	*******	*******
TOTAL NUMBER OF ORGANISMS	6153	5978	1590	2319	******	******	******	******	******	******
NUMBER OF TAXA	21	27	15	15	******	******	******	******	******	******

TABLE J-12a

****(SEMINOLE WQ MONT STUDY - HESTER DENDY MACROINVERTEBRATES (ORGANISMS/SQ M)****

PLACED CYCLE 3 (6/4-6/1979) - RETRIEVED CYCLE 4 (7/16-19/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 1	3	4	5	6	7	9	11	12	13
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	-	-	-	-	-	-
TURBELLARIA B	-	16	-	-	-	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	302	97	32	111	230	159	32	56	16	8
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	119	8
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA MALLOCHI	-	-	-	8	-	-	-	-	-	-
ABLABESMYIA PARAJANTA	-	-	-	8	-	24	-	-	8	8
CHIRONOMUS SP	-	-	-	8	-	-	-	-	-	-
CRICOTOPUS SPP	63	238	87	238	79	-	-	8	-	-
CRYPTOCLADOPELMA SP	-	-	-	-	-	-	-	-	-	-
DICROTENDIPES LEUCOSCELIS	-	-	24	-	-	-	-	-	-	-
DICROTENDIPES NEOMODESTUS	-	-	-	8	24	119	32	-	8	-
DICROTENDIPES NERVOSUS	-	24	-	48	8	-	-	222	-	206
ENDOCHIRONOMUS SP	16	16	-	24	-	8	48	-	103	-

TABLE J-12a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	[illegible]	4	5	6	7	9	11	12	13
GLYPTOTENDIPES SP	-	-	-	-	-	-	8	-	8	-
PARACHIRONOMUS CARINATUS	-	-	-	-	8	-	-	-	-	-
POLYPEDILUM HALTERALE	-	8	-	-	-	-	-	-	-	-
POLYPEDILUM SPP	111	127	206	40	198	-	-	-	8	-
RHEOTANYTARSUS SP	95	8	8	40	182	8	-	-	-	-
STENOCHIRONOMUS SP	-	-	16	-	-	-	-	-	-	-
"TENDIPEDINI SP A" ROBACK 1953	-	8	-	-	-	-	-	-	-	-
THIENEMANNIELLA XENA	-	8	-	-	-	-	-	-	-	-
EPHEMEROPTERA										
CF CINYGMA SP	-	56	-	-	-	-	-	-	-	-
CLOEON SP	-	-	-	-	-	-	-	-	8	-
STENONEMA SP	16	24	-	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	238	79	71	135	48	-	-	-	-	-
UNIDENTIFIED EPHEMEROPTERA	-	-	-	-	-	-	-	-	-	-
TRICOPTERA										
CYRNELLUS SP	16	8	-	-	24	476	167	381	-	397
HYDROPSYCHE SP	-	-	-	8	-	-	-	-	-	-
OECETIS SP	-	-	-	-	-	-	-	-	-	-
POTAMYIA FLAVA	2921	24	405	-	230	-	-	-	8	-
MISCELLANEOUS INSECTA										
ANCYRONYX SP	-	-	8	8	-	-	-	-	-	-
ARGIA SP	-	-	-	-	-	-	-	8	-	-
CORYDALUS SP	-	-	-	-	-	-	-	-	-	-
DINEUTUS SP	-	-	-	-	-	-	-	-	-	-
EMPIDIDAE (NO LARVAL KEY)	-	-	16	16	40	-	-	-	-	-
MACRONYCHUS SP	-	-	-	-	-	-	-	-	-	-
TOTAL NUMBER OF ORGANISMS	3778	731	873	700	1071	794	287	675	286	627
NUMBER OF TAXA	9	13	10	14	11	6	5	5	9	5

TABLE J-12b

L SEMINOLE WQ MGMT STUDY - HESTER DENDY MACROINVERTEBRATES (ORGANISMS/SQ M)

PLACED CYCLE 3 (6/4-6/1979) - RETRIEVED CYCLE 4 (7/16-19/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION 16	18	19	DATA						
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	8	-	-	********	********	********	********	********	********	********
TURBELLARIA B	-	-	-	********	********	********	********	********	********	********
ANNELIDA-OLIGOCHAETA										
NAIDIDAE										
NAIDIDAE	-	-	63	********	********	********	********	********	********	********
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	468	-	-	********	********	********	********	********	********	********
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA MALLOCHI	-	-	-	********	********	********	********	********	********	********
ABLABESMYIA PARAJANTA	-	-	-	********	********	********	********	********	********	********
CHIRONOMUS SP	-	-	-	********	********	********	********	********	********	********
CRICOTOPUS SPP	-	-	-	********	********	********	********	********	********	********
CRYPTOCLADOPELMA SP	32	-	-	********	********	********	********	********	********	********
DICROTENDIPES LEUCOSCELIS	-	-	-	********	********	********	********	********	********	********
DICROTENDIPES NEOMODESTUS	-	-	-	********	********	********	********	********	********	********
DICROTENDIPES NERVOSUS	-	-	-	********	********	********	********	********	********	********
ENDOCHIRONOMUS SP	-	-	-	********	********	********	********	********	********	********

TABLE J-12b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATIONS									
	16	13	19	******	******	******	******	******	******	******
GLYPTOTENDIPES SP	-	-	-	*******	*******	*******	*******	*******	*******	*******
PARACHIRONOMUS CARINATUS	-	-	-	*******	*******	*******	*******	*******	*******	*******
POLYPEDILUM HALTERALE	-	-	-	*******	*******	*******	*******	*******	*******	*******
POLYPEDILUM SPP	-	1905	4063	*******	*******	*******	*******	*******	*******	*******
RHEOTANYTARSUS SP	-	317	2476	*******	*******	*******	*******	*******	*******	*******
STENOCHIRONOMUS SP	-	-	-	*******	*******	*******	*******	*******	*******	*******
"TENDIPEDINI SP A" ROBACK 1953	-	-	-	*******	*******	*******	*******	*******	*******	*******
THIENEMANNIELLA XENA	-	-	-	*******	*******	*******	*******	*******	*******	*******
EPHEMEROPTERA										
CF CINYGMA SP	16	-	-	*******	*******	*******	*******	*******	*******	*******
CLOEON SP	48	-	-	*******	*******	*******	*******	*******	*******	*******
STENONEMA SP	230	-	-	*******	*******	*******	*******	*******	*******	*******
TRICORYTHODES ALBILINEATUS	16	-	127	*******	*******	*******	*******	*******	*******	*******
UNIDENTIFIED EPHEMEROPTERA	8	-	-	*******	*******	*******	*******	*******	*******	*******
TRICOPTERA										
CYRNELLUS SP	-	127	-	*******	*******	*******	*******	*******	*******	*******
HYDROPSYCHE SP	-	-	-	*******	*******	*******	*******	*******	*******	*******
OECETIS SP	-	63	63	*******	*******	*******	*******	*******	*******	*******
POTAMYIA FLAVA	16	13968	14603	*******	*******	*******	*******	*******	*******	*******
MISCELLANEOUS INSECTA										
ANCYRONYX SP	-	-	-	*******	*******	*******	*******	*******	*******	*******
ARGIA SP	-	-	-	*******	*******	*******	*******	*******	*******	*******
CORYDALUS SP	-	127	-	*******	*******	*******	*******	*******	*******	*******
DINEUTUS SP	-	63	-	*******	*******	*******	*******	*******	*******	*******
EMPIDIDAE (NO LARVAL KEY)	-	444	-	*******	*******	*******	*******	*******	*******	*******
MACRONYCHUS SP	16	-	-	*******	*******	*******	*******	*******	*******	*******
TOTAL NUMBER OF ORGANISMS	858	17014	21395	******	******	******	******	******	******	******
NUMBER OF TAXA	10	8	6	******	******	******	******	******	******	******

TABLE J-13a

L SEMINOLE NO NGMT STUDY - HESTER DEACY MACRCINVERTEBRATES (ORGANISMS/SQ M)

PLACED CYCLE 5 (8/13-16/1979) - RETRIEVED CYCLE 6 (9/24-26/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	9	11	12
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	-	-	16	-	-	-	-	-
ANNELIDA-OLIGOCHAETA										
NAIDIDAE	-	8	32	32	95	-	-	-	-	-
TUBIFICIDAE										
TUBIFICIDAE	-	-	8	-	-	-	-	-	-	-
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	-	-	-	-	-	-	-	-	-	-
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA PARAJANTA	16	16	8	-	-	48	40	-	-	-
CRICOTOPUS SP (BICINCTUS GROUP)	-	-	32	-	-	-	-	-	-	-
CRICOTOPUS SP	16	24	-	111	-	-	-	-	-	-
DICROTENDIPES NEOMODESTUS	-	16	8	8	-	-	-	-	-	-
DICROTENDIPES NERVOSUS	444	405	48	238	429	175	127	135	516	-
ENDOCHIRONOMUS SP	32	16	63	119	-	-	48	-	-	-

TABLE J-13a (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 1	2	3	4	5	6	7	9	11	12
GLYPTOTENDIPES SP	7000	4921	1238	2595	5075	2000	341	2214	214	-
MICROPSECTRA SP	-	-	-	-	-	-	-	-	-	-
POLYPEDILUM NEAR CONVICTUM	16	8	24	16	-	-	-	8	-	-
POLYPEDILUM NEAR FALLAX	16	24	8	16	-	32	-	-	-	-
POLYPEDILUM FALTERALE	-	-	-	-	32	-	-	-	-	-
PSECTROCLADIUS SP	16	-	8	-	-	32	-	-	-	-
RHEOCRICOTOPUS ROBACKI	-	-	-	-	16	-	-	-	-	-
RHEOTANYTARSUS SP	-	16	-	32	48	-	-	-	-	-
TANYTARSUS SP	-	-	8	-	-	-	-	-	-	-
THIENEMANNIELLA SP	-	-	8	-	-	-	-	-	-	-
EPHEMEROPTERA										
STENONEMA SP	-	-	16	-	-	-	-	-	-	-
TRICORYTHODES ALBILINEATUS	16	24	32	40	-	-	-	-	-	-
TRICHOPTERA										
AGRAYLEA SP	-	8	-	8	-	-	-	-	-	-
PHYLOCENTROPUS SP	48	16	24	-	16	79	-	246	421	-
POTAMYIA FLAVA	79	48	32	151	111	-	556	-	-	-
MISCELLANEOUS INSECTA										
CORYDALUS SP	-	-	-	-	-	-	-	-	-	-
LIBELLULA SP	-	-	-	-	-	-	-	-	-	8
STENELMIS SP	-	-	-	8	-	-	-	-	8	-
TOTAL NUMBER OF ORGANISMS	7699	5550	1557	3374	5842	2366	1112	2603	1159	8
NUMBER OF TAXA	11	14	17	13	9	6	5	4	4	1

TABLE J-13b

L SEMINOLE WQ MGMT STUDY - HESTER DENDY MACROINVERTEBRATES (ORGANISMS/SQ M)

PLACED CYCLE 5 (9/13-16/1979) - RETRIEVED CYCLE 6 (9/24-26/1979)

*** PASS TWO - CODED DATA USED

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	18	19	******	******	******	******	******	******
PLATYHELMINTHES-TURBELLARIA										
TURBELLARIA	-	-	32	1968	*******	*******	*******	*******	*******	*******
ANNELIDA-OLIGOCHAETA										
NAIDIDAE	-	-	-	-	*******	*******	*******	*******	*******	*******
TUBIFICIDAE										
TUBIFICIDAE	-	-	-	-	*******	*******	*******	*******	*******	*******
ARTHROPODA-CRUSTACEA										
HYALELLA AZTECA	16	127	-	16	*******	*******	*******	*******	*******	*******
ARTHROPODA-INSECTA										
CHIRONOMIDAE										
ABLABESMYIA PARAJANTA	-	-	-	-	*******	*******	*******	*******	*******	*******
CRICOTOPUS SP (BICINCTUS GROUP)	-	-	-	-	*******	*******	*******	*******	*******	*******
CRICOTOPUS SP	-	-	-	-	*******	*******	*******	*******	*******	*******
DICROTENDIPES NEOMODESTUS	-	119	-	-	*******	*******	*******	*******	*******	*******
DICROTENDIPES NERVOSUS	484	524	-	-	*******	*******	*******	*******	*******	*******
ENDOCHIRONOMUS SP	-	24	-	-	*******	*******	*******	*******	*******	*******

TABLE J-13b (cont.)

TAXONOMIC CLASSIFICATION	NUMBER OF ORGANISMS AT STATION: 13	14	18	19
GLYPTOTENDIPES SP	56	95	32	-
MICROPSECTRA SP	-	8	-	-
POLYPEDILUM NEAR CONVICTUM	-	-	286	317
POLYPEDILUM NEAR FALLAX	8	16	-	-
POLYPEDILUM HALTERALE	-	-	-	-
PSECTROCLADIUS SP	-	-	-	-
RHEOCRICOTOPUS ROBACKI	-	-	-	-
RHEOTANYTARSUS SP	-	-	63	95
TANYTARSUS SP	-	-	-	-
THIENEMANNIELLA SP	-	-	-	-
EPHEMEROPTERA				
STENONEMA SP	-	-	-	-
TRICORYTHODES ALBILINEATUS	-	-	571	16
TRICOPTERA				
AGRAYLEA SP	-	-	-	-
PHYLOCENTROPUS SP	135	349	-	-
POTAMYIA FLAVA	-	-	10254	5143
MISCELLANEOUS INSECTA				
CORYDALUS SP	-	-	32	-
LIBELLULA SP	-	-	-	-
STENELMIS SP	-	-	-	-
TOTAL NUMBER OF ORGANISMS	699	1262	11270	7555
NUMBER OF TAXA	5	8	7	6

APPENDIX K

CORBICULA TISSUE ANALYSIS RESULTS

LIST OF TABLES

TABLE K-1

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

CORBICULA TISSUE ANALYSIS RESULTS

PARAMETER NAME (UNITS)	STATION 19 8/14/79
PHYSICAL & CHEMICAL DATA	
PHYSICAL DATA	
MOISTURE CONTENT (% TOTAL WT)	82.2
HEAVY METALS	
LEAD (MG PB/KG WET WT)	10.30
MERCURY (MG HG/KG WET WT)	0.219
SELENIUM (MG SE/KG WET WT)	0.43
ZINC (MG ZN/KG WET WT)	157.00
CHLORINATED HYDROCARBONS	
ALDRIN (UG/KG WET WT)	< 0.2
BHC-ALPHA ISOMER (UG/KG WET WT)	< 0.2
BHC-BETA ISOMER (UG/KG WET WT)	< 0.2
BHC-GAMMA ISOMER (UG/KG WET WT)	< 0.1
CHLORDANE (UG/KG WET WT)	< 5.0
P,P' DDD (UG/KG WET WT)	< 0.5
O,P' DDT (UG/KG WET WT)	< 0.5
P,P' DDT (UG/KG WET WT)	< 0.5
DIELDRIN (UG/KG WET WT)	< 0.5
ENDOSULFAN SULFATE (UG/KG WET WT)	< 5.
HEPTACHLOR (UG/KG WET WT)	< 0.2
HEPTACHLOR EPOXIDE (UG/KG WET WT)	< 0.2
METHOXYCHLOR (UG/KG WET WT)	< 5.0
MIREX (UG/KG WET WT)	< 5.
PCB (UG/KG WET WT)	< 25.
PENTACHLOROPHENOL (UG/KG WET WT)	< 5.
TOXAPHENE (UG/KG WET WT)	< 5.

APPENDIX L

SEDIMENT SAMPLING RESULTS

LIST OF TABLES

LIST OF FIGURES

TABLE L-1a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/15,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79
PHYSICAL & CHEMICAL DATA				
PHYSICAL DATA				
LOSS ON IGNITION (MG/KG DRY WT)	2000	1000	1000	3100
MOISTURE CONTENT (% TOTAL DRY WT)	23.80	21.70	22.40	22.30
MISCELLANEOUS CHEMICAL DATA				
CARBON, ORGANIC (GM C/KG DRY WT)	0.243	0.051	0.039	2.000
NITROGEN, TOTAL KJELDAHL (MG N/KG)	55.	37.	72.	36.
OIL & GREASE (MG/KG DRY WT)	< 30.	< 50.	< 50.	< 50.
PHOSPHORUS, TOTAL (MG P/KG DRY WT)	12.60	5.84	14.50	7.07
HEAVY METALS				
ARSENIC (MG AS/KG DRY WT)	0.28	0.11	0.19	0.47
CADMIUM (MG CD/KG DRY WT)	<0.50	<0.50	0.53	<0.50
CHROMIUM (MG CR/KG DRY WT)	1.57	1.85	<1.20	5.21
COPPER (MG CU/KG DRY WT)	<0.67	<0.64	<0.64	<0.64
IRON (MG FE/KG DRY WT)	1470.	646.	742.	1700.
LEAD (MG PB/KG DRY WT)	19.10	14.90	18.10	13.70
MANGANESE (MG MN/KG DRY WT)	119.0	115.0	30.0	82.2
MERCURY (MG HG/KG DRY WT)	0.06	0.06	0.15	0.14
NICKEL (MG NI/KG DRY WT)	<0.66	2.17	<0.64	1.87
ZINC (MG ZN/KG DRY WT)	6.36	3.83	2.46	4.00
CHLORINATED HYDROCARBONS				
ALDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
AROCLOR 1242 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
AROCLOR 1254 (UG/KG DRY WT)	< 0.5	16.0	< 0.3	< 0.5
AROCLOR 1260 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
BHC-ALPHA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-BETA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-GAMMA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
CHLORDANE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
2,4-D (UG/KG DRY WT)	< 2.	< 2.	< 2.	< 2.
P,P' DDD (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
P,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
O,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
DIELDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDOTHAL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
ENDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDRIN ALDEHYDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
GLYPHOSPHATE (UG/KG DRY WT)	< 1.0	< 1.0	< 1.0	< 1.0
HEPTACHLOR (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
HEPTACHLOR EPOXIDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
METHOXYCHLOR (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
MIREX (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
PENTACHLOROPHENOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
TOXAPHENE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5

TABLE L-1b

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 05 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79	STATION 08 8/14/79
PHYSICAL & CHEMICAL DATA				
PHYSICAL DATA				
LOSS ON IGNITION (MG/KG DRY WT)	2700	3100	1400	77800
MOISTURE CONTENT (% TOTAL DRY WT)	21.30	22.00	26.30	47.90
MISCELLANEOUS CHEMICAL DATA				
CARBON, ORGANIC (GM C/KG DRY WT)	0.360	0.281	0.193	17.000
NITROGEN, TOTAL KJELDAHL (MG N/KG)	30.	54.	38.	1210.
OIL & GREASE (MG/KG DRY WT)	< 50.	< 50.	100.	440.
PHOSPHORUS, TOTAL (MG P/KG DRY WT)	3.98	9.27	9.11	98.60
HEAVY METALS				
ARSENIC (MG AS/KG DRY WT)	0.23	0.31	<0.05	5.90
CADMIUM (MG CD/KG DRY WT)	<0.50	<0.50	<0.50	2.30
CHROMIUM (MG CR/KG DRY WT)	1.27	1.28	3.46	40.70
COPPER (MG CU/KG DRY WT)	<0.64	<0.64	<0.69	19.20
IRON (MG FE/KG DRY WT)	980.	804.	1240.	15100.
LEAD (MG PB/KG DRY WT)	16.40	18.30	10.40	61.90
MANGANESE (MG MN/KG DRY WT)	38.1	134.0	53.6	1070.0
MERCURY (MG HG/KG DRY WT)	0.05	0.04	0.14	0.71
NICKEL (MG NI/KG DRY WT)	<0.64	<0.64	4.00	20.40
ZINC (MG ZN/KG DRY WT)	3.91	6.15	10.20	69.10
CHLORINATED HYDROCARBONS				
ALDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
AROCLOR 1242 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
AROCLOR 1254 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	48.0
AROCLOR 1260 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
BHC-ALPHA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-BETA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-GAMMA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
CHLORDANE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
2,4 D (UG/KG DRY WT)	< 2.	< 2.	< 2.	< 2.
O,P' DDD (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDE (UG/KG DRY WT)	1.1	< 0.1	< 0.1	1.5
O,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
DIELDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDOTHAL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
ENDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDRIN ALDEHYDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
GLYPHOSPHATE (UG/KG DRY WT)	< 1.0	< 1.0	< 1.0	< 1.0
HEPTACHLOR (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
HEPTACHLOR EPOXIDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
METHOXYCHLOR (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
MIREX (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
PENTACHLOROPHENOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
TOXAPHENE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5

TABLE L-1c

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 09 8/14/79	STATION 10 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79
PHYSICAL & CHEMICAL DATA				
PHYSICAL DATA				
LOSS ON IGNITION (MG/KG DRY WT)	65600	89100	113000	9100
MOISTURE CONTENT (% TOTAL DRY WT)	46.60	53.10	62.40	22.70
MISCELLANEOUS CHEMICAL DATA				
CARBON, ORGANIC (GM C/KG DRY WT)	17.100	23.800	27.400	2.900
NITROGEN, TOTAL KJELDAHL (MG N/KG)	1310.	1820.	2160.	357.
OIL & GREASE (MG/KG DRY WT)	690.	< 50.	385.	< 50.
PHOSPHORUS, TOTAL (MG P/KG DRY WT)	42.10	424.00	31.30	20.00
HEAVY METALS				
ARSENIC (MG AS/KG DRY WT)	2.96	6.79	7.82	0.22
CADMIUM (MG CD/KG DRY WT)	1.60	1.60	2.40	<0.50
CHROMIUM (MG CR/KG DRY WT)	23.90	33.10	47.90	<1.20
COPPER (MG CU/KG DRY WT)	12.50	20.90	24.60	<0.65
IRON (MG FE/KG DRY WT)	13100.	16900.	20500.	362.
LEAD (MG PB/KG DRY WT)	36.60	63.60	45.00	13.10
MANGANESE (MG MN/KG DRY WT)	821.0	1350.0	1260.0	79.3
MERCURY (MG HG/KG DRY WT)	0.17	0.44	0.32	0.72
NICKEL (MG NI/KG DRY WT)	14.70	22.30	25.10	<0.65
ZINC (MG ZN/KG DRY WT)	52.50	78.80	93.10	4.92
CHLORINATED HYDROCARBONS				
ALDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
AROCLOR 1242 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
AROCLOR 1254 (UG/KG DRY WT)	31.0	< 0.5	< 0.5	< 0.5
AROCLOR 1260 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
BHC-ALPHA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-BETA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-GAMMA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
CHLORDANE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
2,4 D (UG/KG DRY WT)	< 2.	< 2.	< 2.	< 2.
P,P' DDD (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDE (UG/KG DRY WT)	< 0.1	1.2	< 0.1	< 0.1
O,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
DIELDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDOTHOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
ENDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDRIN ALDEHYDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
GLYPHOSPHATE (UG/KG DRY WT)	< 1.0	< 1.0	< 1.0	< 1.0
HEPTACHLOR (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
HEPTACHLOR EPOXIDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
METHOXYCHLOR (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
MIREX (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
PENTACHLOROPHENOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
TOXAPHENE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5

TABLE L-1d

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 13 8/13/79	STATION 14 8/16/79	STATION 15 8/13/79	STATION 16 8/13/79
PHYSICAL & CHEMICAL DATA				
PHYSICAL DATA				
LOSS ON IGNITION (MG/KG DRY WT)	15200	164000	91700	4200
MOISTURE CONTENT (% TOTAL DRY WT)	29.40	70.10	53.10	24.60
MISCELLANEOUS CHEMICAL DATA				
CARBON, ORGANIC (GM C/KG DRY WT)	4.290	54.600	20.700	0.395
NITROGEN, TOTAL KJELDAHL (MG N/KG)	337.	4960.	1380.	167.
OIL & GREASE (MG/KG DRY WT)	< 50.	605.	< 50.	< 50.
PHOSPHORUS, TOTAL (MG P/KG DRY WT)	62.00	350.00	271.00	43.50
HEAVY METALS				
ARSENIC (MG AS/KG DRY WT)	<0.05	2.61	5.82	0.06
CADMIUM (MG CD/KG DRY WT)	3.70	0.77	2.60	0.66
CHROMIUM (MG CR/KG DRY WT)	13.50	53.20	4.51	4.44
COPPER (MG CU/KG DRY WT)	3.54	0.92	24.00	<0.66
IRON (MG FE/KG DRY WT)	5710.	13900.	16700.	2340.
LEAD (MG PB/KG DRY WT)	14.50	83.70	42.30	16.00
MANGANESE (MG MN/KG DRY WT)	363.0	292.0	1220.0	71.6
MERCURY (MG HG/KG DRY WT)	0.36	0.20	0.65	0.30
NICKEL (MG NI/KG DRY WT)	3.90	2.69	6.83	5.13
ZINC (MG ZN/KG DRY WT)	17.60	21.90	75.70	8.75
CHLORINATED HYDROCARBONS				
ALDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
AROCLOR 1242 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
AROCLOR 1254 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
AROCLOR 1260 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
BHC-ALPHA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-BETA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
BHC-GAMMA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
CHLORDANE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
2,4 D (UG/KG DRY WT)	< 2.	< 2.	< 2.	< 2.
P,P' DDD (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
P,P' DDE (UG/KG DRY WT)	0.4	5.4	0.6	< 0.1
P,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
O,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
DIELDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDOTHAL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
ENDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
ENDRIN ALDEHYDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
GLYPHOSPHATE (UG/KG DRY WT)	< 1.0	< 1.0	< 1.0	< 1.0
HEPTACHLOR (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
HEPTACHLOR EPOXIDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
METHOXYCHLOR (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2	< 0.2
MIREX (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1	< 0.1
PENTACHLOROPHENOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5
TOXAPHENE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5	< 0.5

TABLE L-1e

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-79-C-0101) PHASE II,CYCLE 5 (9/13-9/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 17 9/13/79	STATION 18 9/14/79	STATION 19 9/14/79
PHYSICAL & CHEMICAL DATA			
PHYSICAL DATA			
LOSS ON IGNITION (MG/KG DRY WT)	1300	7100	11400
MOISTURE CONTENT (% TOTAL DRY WT)	22.00	19.80	22.20
MISCELLANEOUS CHEMICAL DATA			
CARBON, ORGANIC (GM C/KG DRY WT)	0.195	9.260	6.010
NITROGEN, TOTAL KJELDAHL (MG N/KG)	54.	227.	180.
OIL & GREASE (MG/KG DRY WT)	< 50.	240.	< 50.
PHOSPHORUS, TOTAL (MG P/KG DRY WT)	19.90	127.00	15.20
HEAVY METALS			
ARSENIC (MG AS/KG DRY WT)	0.54	1.02	0.29
CADMIUM (MG CD/KG DRY WT)	0.77	0.75	0.51
CHROMIUM (MG CR/KG DRY WT)	3.85	2.47	2.05
COPPER (MG CU/KG DRY WT)	<0.64	<0.62	<0.64
IRON (MG FE/KG DRY WT)	1760.	1870.	1940.
LEAD (MG PB/KG DRY WT)	10.60	14.50	10.20
MANGANESE (MG MN/KG DRY WT)	65.3	173.0	212.0
MERCURY (MG HG/KG DRY WT)	0.34	0.20	0.44
NICKEL (MG NI/KG DRY WT)	4.00	1.93	1.29
ZINC (MG ZN/KG DRY WT)	5.77	5.86	7.46
CHLORINATED HYDROCARBONS			
ALDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
AROCLOR 1242 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5
AROCLOR 1254 (UG/KG DRY WT)	40.0	38.0	64.0
AROCLOR 1260 (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5
BHC-ALPHA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
BHC-BETA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
BHC-GAMMA ISOMER (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
CHLORDANE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5
2,4 D (UG/KG DRY WT)	< 2.	< 2.	< 2.
P,P' DDD (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2
P,P' DDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
O,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2
P,P' DDT (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2
DIELDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
ENDOTHOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5
ENDRIN (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
ENDRIN ALDEHYDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
GLYPHOSPHATE (UG/KG DRY WT)	< 1.0	< 1.0	< 1.0
HEPTACHLOR (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
HEPTACHLOR EPOXIDE (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
METHOXYCHLOR (UG/KG DRY WT)	< 0.2	< 0.2	< 0.2
MIREX (UG/KG DRY WT)	< 0.1	< 0.1	< 0.1
PENTACHLOROPHENOL (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5
TOXAPHENE (UG/KG DRY WT)	< 0.5	< 0.5	< 0.5

TABLE L-2a

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 01 8/15/79	STATION 02 8/15/79	STATION 03 8/15/79	STATION 04 8/15/79
MECHANICAL DATA				
SIEVE ANALYSIS				
BED MTL (% FINER THAN 38.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 25.4 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 19.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 15.9 MM)	100.0	100.0	100.0	99.6
BED MTL (% FINER THAN 12.7 MM)	100.0	100.0	100.0	99.6
BED MTL (% FINER THAN 9.52 MM)	100.0	100.0	100.0	99.6
BED MTL (% FINER THAN 6.35 MM)	100.0	99.9	100.0	99.6
BED MTL (% FINER THAN 3.35 MM)	99.8	99.7	[illegible]	99.5
BED MTL (% FINER THAN 1.65 MM)	99.4	99.1	99.7	94.6
BED MTL (% FINER THAN 0.295 MM)	33.50	12.20	3.74	11.99
BED MTL (% FINER THAN 0.149 MM)	2.37	1.75	1.58	2.60
BED MTL (% FINER THAN 0.074 MM)	1.93	0.98	1.23	1.63
HYDROMETER ANALYSIS				
EQUIVALENT FALL DIA (MICRONS)	35.	35.	35.	35.
% FINER THAN	1.12	0.80	1.12	1.21
EQUIVALENT FALL DIA (MICRONS)	23.	23.	23.	23.
% FINER THAN	0.80	0.80	0.99	0.91
EQUIVALENT FALL DIA (MICRONS)	13.0	13.0	13.0	13.0
% FINER THAN	0.32	0.90	0.80	0.91
EQUIVALENT FALL DIA (MICRONS)	9.0	9.0	9.0	9.0
% FINER THAN	0.32	0.90	0.64	0.91
EQUIVALENT FALL DIA (MICRONS)	6.0	6.0	6.0	6.0
% FINER THAN	0.32	0.80	0.64	0.91
EQUIVALENT FALL DIA (MICRONS)	3.0	3.0	3.0	3.0
% FINER THAN	0.32	0.80	0.64	0.91
EQUIVALENT FALL DIA (MICRONS)	1.00	1.00	1.00	1.00
% FINER THAN	0.32	0.60	0.64	0.76

TABLE L-2b

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 05 8/15/79	STATION 06 8/15/79	STATION 07 8/14/79	STATION 08 8/14/79
MECHANICAL DATA				
SIEVE ANALYSIS				
BED MTL (% FINER THAN 38.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 25.4 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 19.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 15.9 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 12.7 MM)	99.5	100.0	100.0	100.0
BED MTL (% FINER THAN 9.52 MM)	97.8	100.0	100.0	100.0
BED MTL (% FINER THAN 6.55 MM)	95.4	99.9	100.0	100.0
BED MTL (% FINER THAN 3.35 MM)	92.6	99.8	100.0	100.0
BED MTL (% FINER THAN 1.65 MM)	84.0	99.2	100.0	100.0
BED MTL (% FINER THAN 0.295 MM)	7.50	13.90	39.90	99.70
BED MTL (% FINER THAN 0.149 MM)	2.18	2.12	13.10	98.40
BED MTL (% FINER THAN 0.074 MM)	1.38	1.56	8.04	79.80
HYDROMETER ANALYSIS				
EQUIVALENT FALL DIA (MICRONS)	35.	35.	35.	35.
% FINER THAN	1.07	1.29	1.60	49.70
EQUIVALENT FALL DIA (MICRONS)	23.	23.	23.	23.
% FINER THAN	1.07	0.96	1.29	46.40
EQUIVALENT FALL DIA (MICRONS)	13.0	13.0	13.0	13.0
% FINER THAN	0.67	0.96	1.29	39.70
EQUIVALENT FALL DIA (MICRONS)	9.0	9.0	9.0	9.0
% FINER THAN	0.67	0.96	1.23	36.40
EQUIVALENT FALL DIA (MICRONS)	6.0	6.0	6.0	6.0
% FINER THAN	0.67	0.96	1.12	32.10
EQUIVALENT FALL DIA (MICRONS)	3.0	3.0	3.0	3.0
% FINER THAN	0.67	0.96	0.96	25.50
EQUIVALENT FALL DIA (MICRONS)	1.00	1.00	1.00	1.00
% FINER THAN	0.67	0.80	0.80	17.20

TABLE L-2c

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 09 8/14/79	STATION 10 8/14/79	STATION 11 8/14/79	STATION 12 8/16/79
MECHANICAL DATA				
SIEVE ANALYSIS				
BED MTL (% FINER THAN 38.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 25.4 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 19.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 15.9 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 12.7 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 9.52 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 6.55 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 3.35 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 1.65 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 0.295 MM)	99.50	100.00	99.90	59.90
BED MTL (% FINER THAN 0.149 MM)	89.70	99.50	99.30	27.50
BED MTL (% FINER THAN 0.074 MM)	76.80	97.10	97.80	9.21
HYDROMETER ANALYSIS				
EQUIVALENT FALL DIA (MICRONS)	35.	35.	35.	35.
% FINER THAN	48.80	52.20	46.80	3.37
EQUIVALENT FALL DIA (MICRONS)	23.	23.	23.	23.
% FINER THAN	47.20	47.20	43.40	3.21
EQUIVALENT FALL DIA (MICRONS)	13.0	13.0	13.0	13.0
% FINER THAN	37.00	37.10	35.70	2.73
EQUIVALENT FALL DIA (MICRONS)	9.0	9.0	9.0	9.0
% FINER THAN	31.00	33.70	33.30	2.25
EQUIVALENT FALL DIA (MICRONS)	6.0	6.0	6.0	6.0
% FINER THAN	25.90	27.60	30.30	1.77
EQUIVALENT FALL DIA (MICRONS)	3.0	3.0	3.0	3.0
% FINER THAN	19.50	20.20	21.20	1.29
EQUIVALENT FALL DIA (MICRONS)	1.00	1.00	1.00	1.00
% FINER THAN	13.50	13.30	13.10	1.24

TABLE L-2d

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

PARAMETER NAME (UNITS)	STATION 13 8/13/79	STATION 14 8/16/79	STATION 15 8/13/79	STATION 16 8/13/79
MECHANICAL DATA				
SIEVE ANALYSIS				
BED MTL (% FINER THAN 38.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 25.4 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 19.1 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 15.9 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 12.7 MM)	100.0	100.0	100.0	100.0
BED MTL (% FINER THAN 9.52 MM)	100.0	100.0	100.0	99.0
BED MTL (% FINER THAN 6.55 MM)	100.0	100.0	100.0	99.0
BED MTL (% FINER THAN 3.35 MM)	100.0	100.0	100.0	99.3
BED MTL (% FINER THAN 1.65 MM)	100.0	100.0	100.0	99.6
BED MTL (% FINER THAN 0.295 MM)	93.30	99.10	99.10	2.31
BED MTL (% FINER THAN 0.149 MM)	53.90	97.30	96.30	2.40
BED MTL (% FINER THAN 0.074 MM)	12.40	92.50	68.60	1.97
HYDROMETER ANALYSIS				
EQUIVALENT FALL DIA (MICRONS)	35.	35.	35.	35.
% FINER THAN	5.14	10.20	28.60	1.60
EQUIVALENT FALL DIA (MICRONS)	23.	23.	23.	23.
% FINER THAN	4.50	9.43	26.20	1.50
EQUIVALENT FALL DIA (MICRONS)	13.0	13.0	13.0	13.0
% FINER THAN	3.85	7.61	16.90	1.44
EQUIVALENT FALL DIA (MICRONS)	9.0	9.0	9.0	9.0
% FINER THAN	3.85	6.30	14.90	1.28
EQUIVALENT FALL DIA (MICRONS)	6.0	6.0	6.0	6.0
% FINER THAN	3.53	5.17	12.10	1.12
EQUIVALENT FALL DIA (MICRONS)	3.0	3.0	3.0	3.0
% FINER THAN	2.89	3.65	9.63	1.12
EQUIVALENT FALL DIA (MICRONS)	1.00	1.00	1.00	1.00
% FINER THAN	2.25	1.83	5.72	0.96

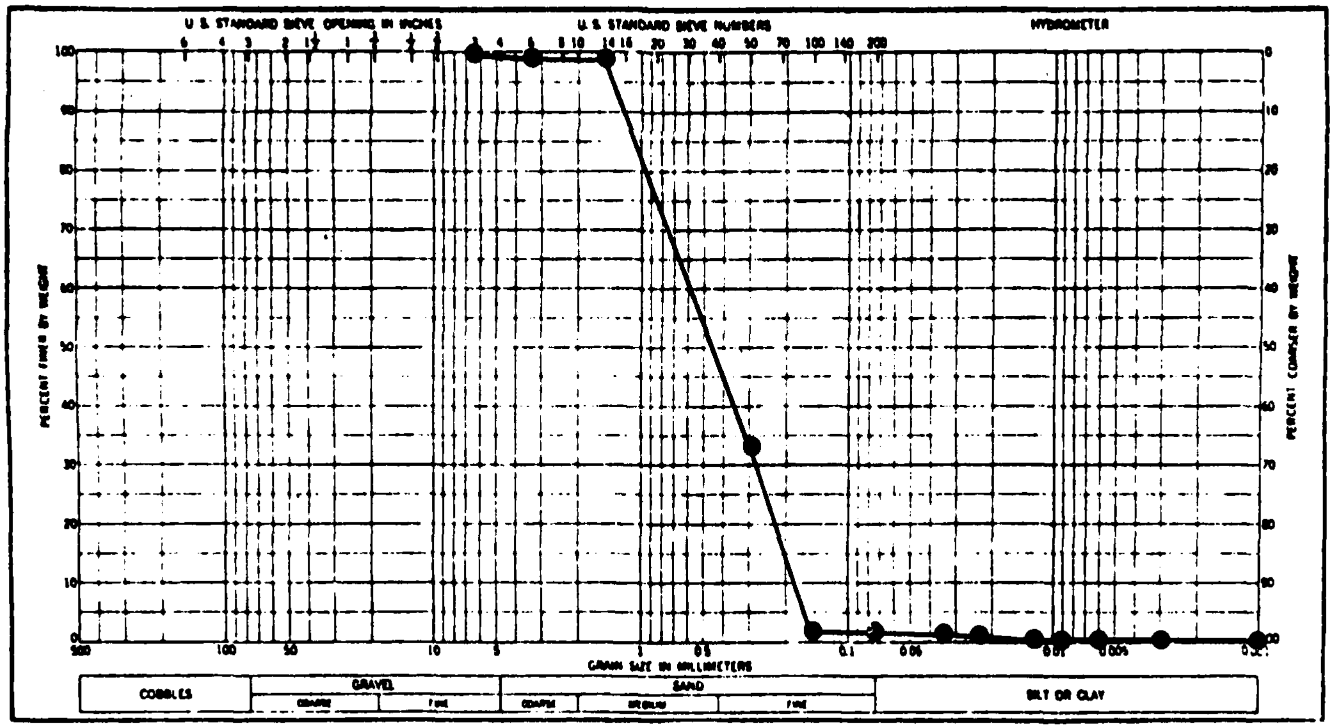
TABLE L-2e

** LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY **
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101) PHASE II,CYCLE 5 (8/13-8/16,1979)

SEDIMENT SAMPLING RESULTS

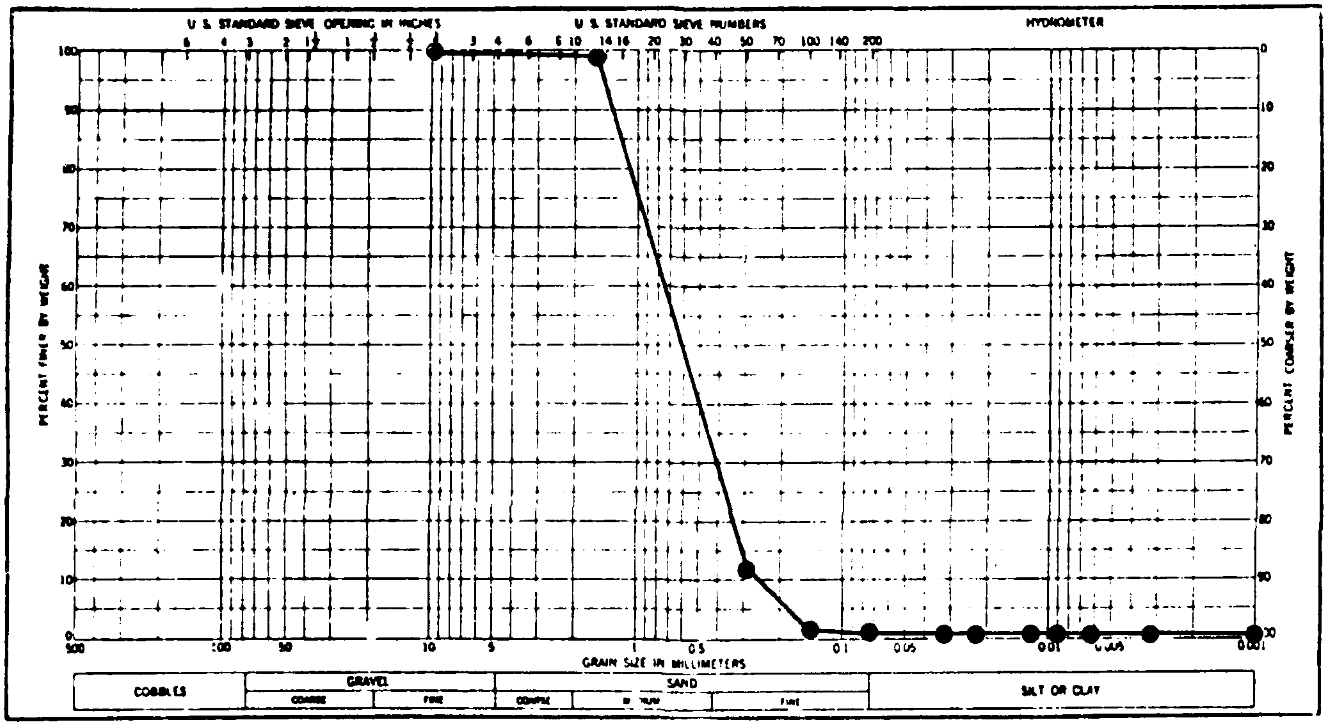
PARAMETER NAME (UNITS)	STATION 17 8/13/79	STATION 19 8/14/79	STATION 19 8/14/79
MECHANICAL DATA			
SIEVE ANALYSIS			
BED MTL (% FINER THAN 38.1 MM)	100.0	100.0	100.0
BED MTL (% FINER THAN 25.4 MM)	100.0	96.4	100.0
BED MTL (% FINER THAN 19.1 MM)	100.0	89.0	93.7
BED MTL (% FINER THAN 15.9 MM)	100.0	83.0	92.7
BED MTL (% FINER THAN 12.7 MM)	100.0	79.1	91.3
BED MTL (% FINER THAN 9.52 MM)	100.0	77.4	73.0
BED MTL (% FINER THAN 6.55 MM)	100.0	75.1	65.5
BED MTL (% FINER THAN 3.35 MM)	100.0	72.2	55.0
BED MTL (% FINER THAN 1.65 MM)	100.0	66.4	45.0
BED MTL (% FINER THAN 0.295 MM)	10.20	4.13	3.40
BED MTL (% FINER THAN 0.149 MM)	2.29	3.58	3.35
BED MTL (% FINER THAN 0.074 MM)	2.02	3.33	2.99
HYDROMETER ANALYSIS			
EQUIVALENT FALL DIA (MICRONS)	35.	35.	35.
% FINER THAN	1.44	2.56	2.41
EQUIVALENT FALL DIA (MICRONS)	23.	23.	23.
% FINER THAN	1.44	2.09	2.25
EQUIVALENT FALL DIA (MICRONS)	13.0	13.0	13.0
% FINER THAN	1.44	1.76	2.09
EQUIVALENT FALL DIA (MICRONS)	9.0	9.0	9.0
% FINER THAN	1.44	1.23	2.09
EQUIVALENT FALL DIA (MICRONS)	6.0	6.0	6.0
% FINER THAN	1.29	1.28	2.09
EQUIVALENT FALL DIA (MICRONS)	3.0	3.0	3.0
% FINER THAN	1.23	1.28	2.09
EQUIVALENT FALL DIA (MICRONS)	1.00	1.00	1.00
% FINER THAN	1.12	1.29	1.93

FIGURE L-1a. SEDIMENT GRADATION CURVE, STATION 1, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	3

FIGURE L-1b. SEDIMENT GRADATION CURVE, STATION 2, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank lk. upstream)	Depth (M)
	50%	3

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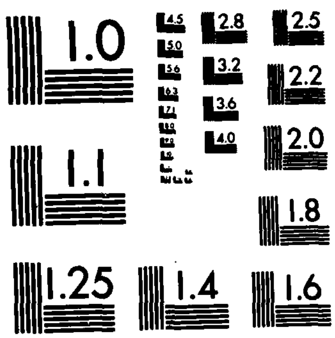
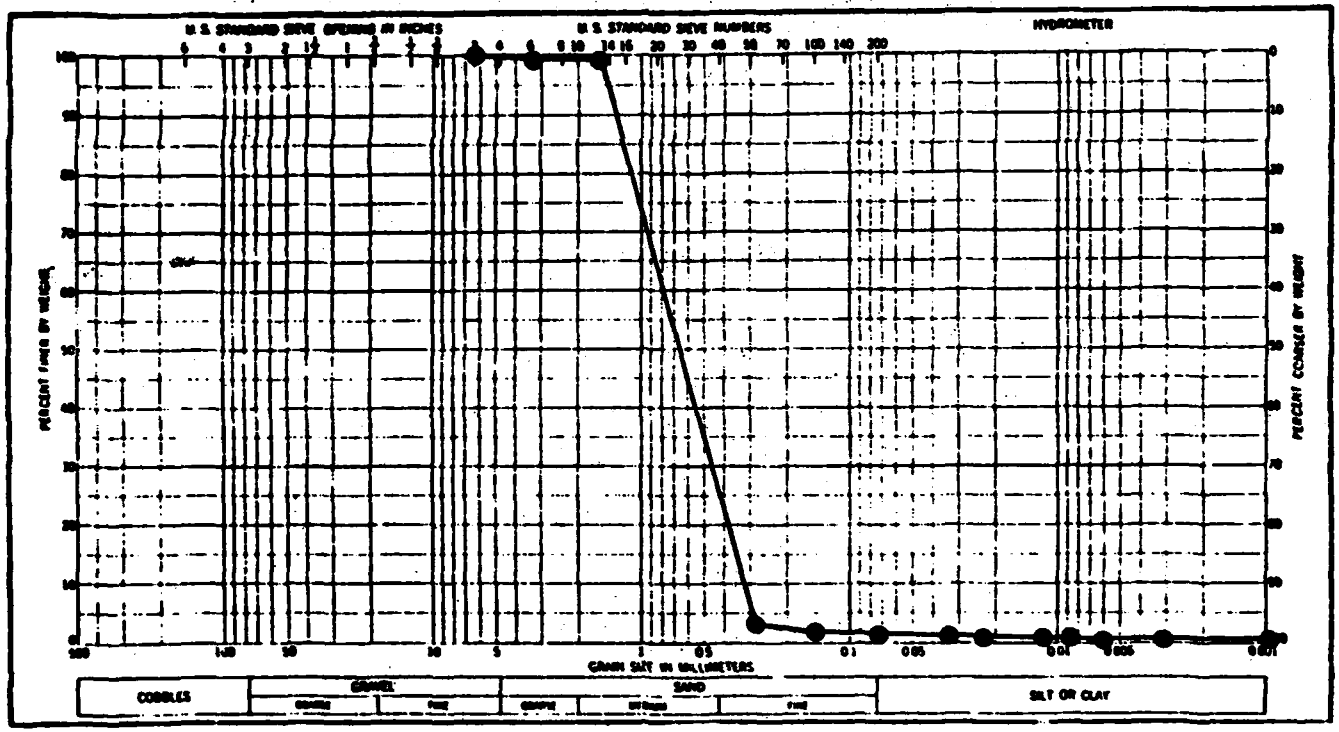
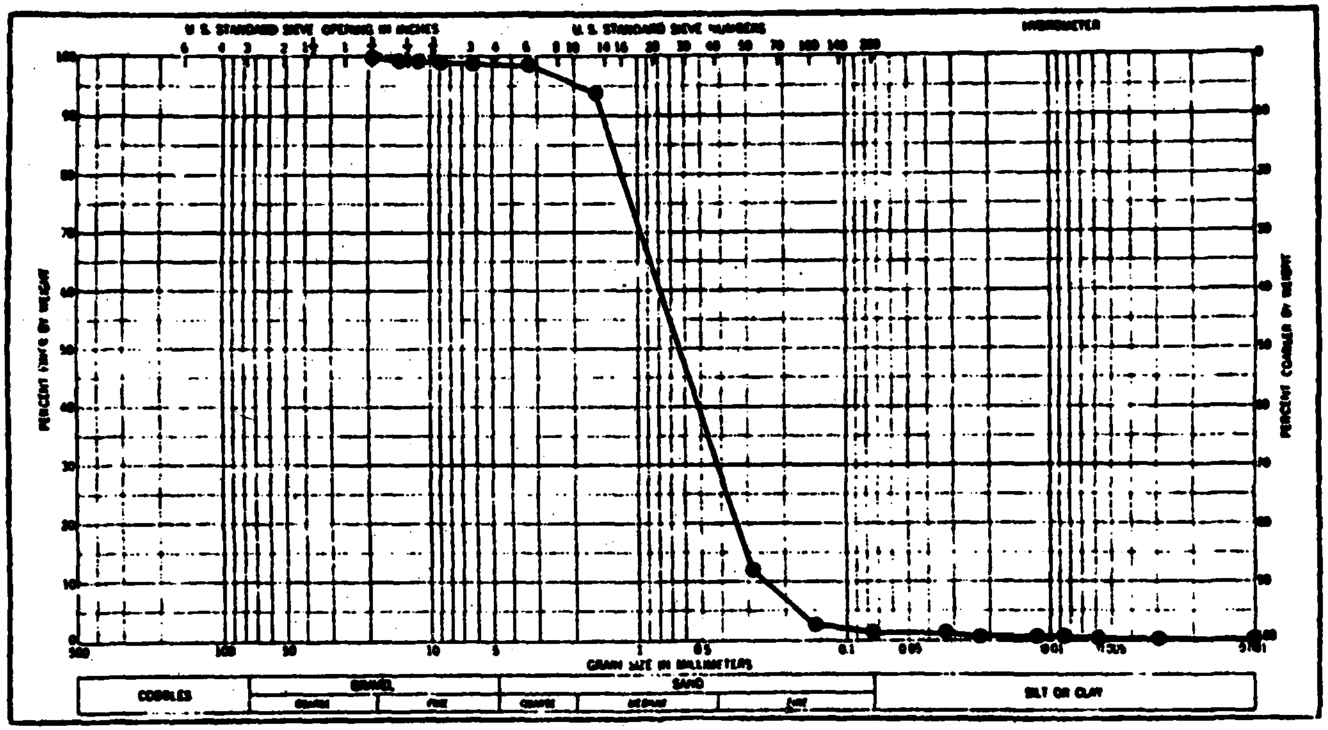

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3

FIGURE L-1c. SEDIMENT GRADATION CURVE, STATION 3, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	5

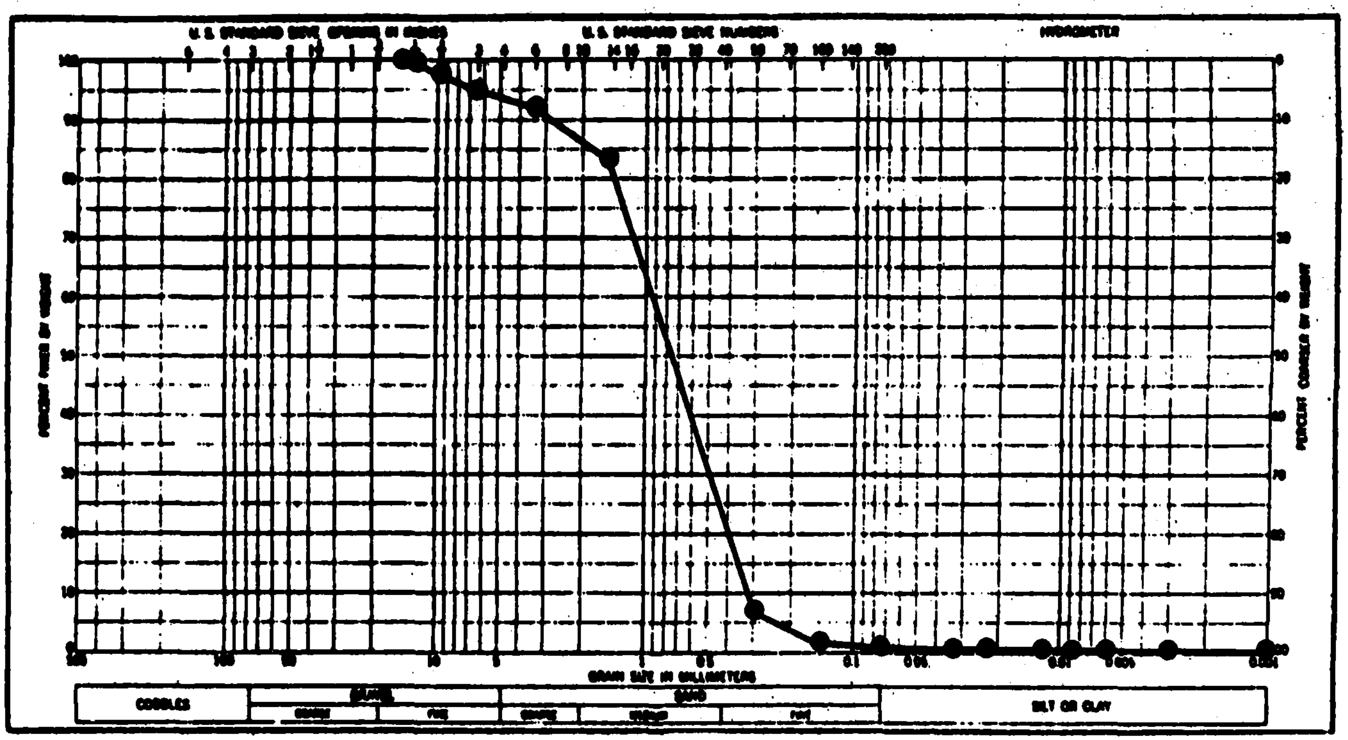
FIGURE L-1d. SEDIMENT GRADATION CURVE, STATION 4, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

X-Sectio* (% from R-Bank lk. upstream)	Depth (M)
50%	3

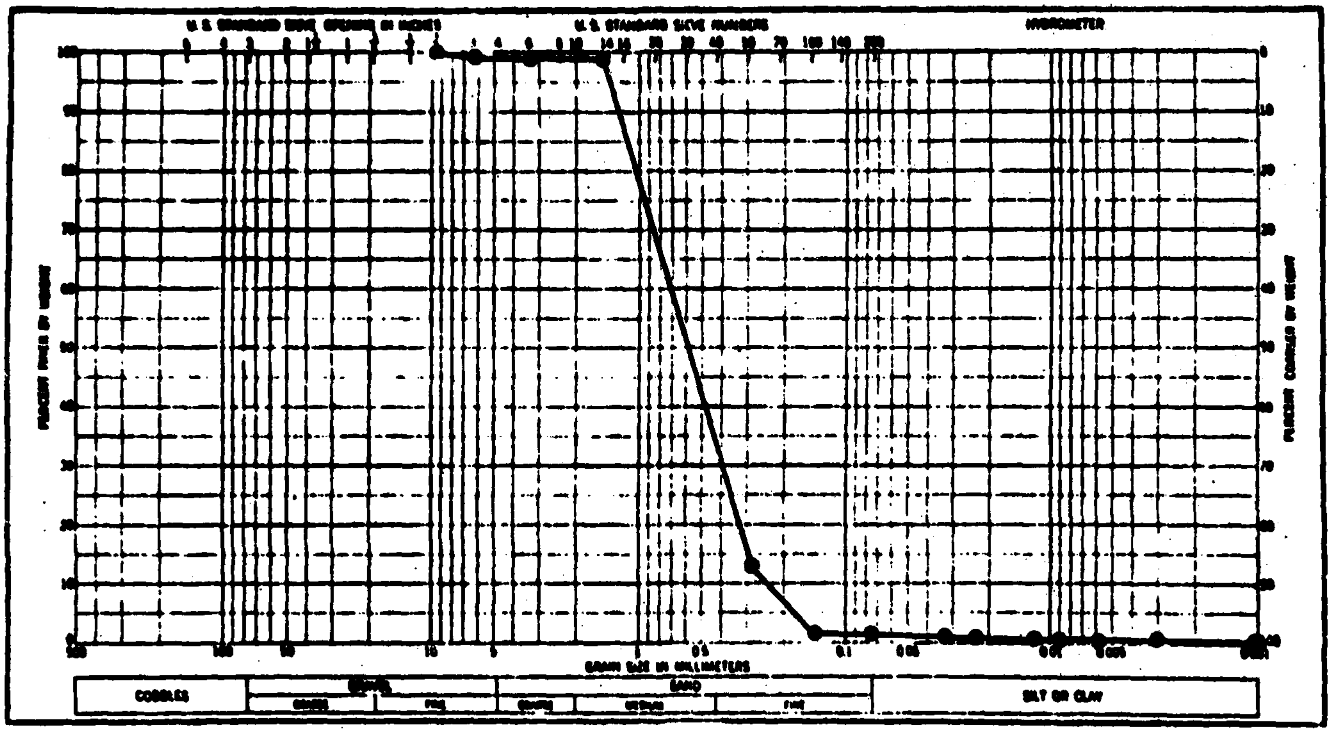
FIGURE L-1e. SEDIMENT GRADATION CURVE, STATION 5, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

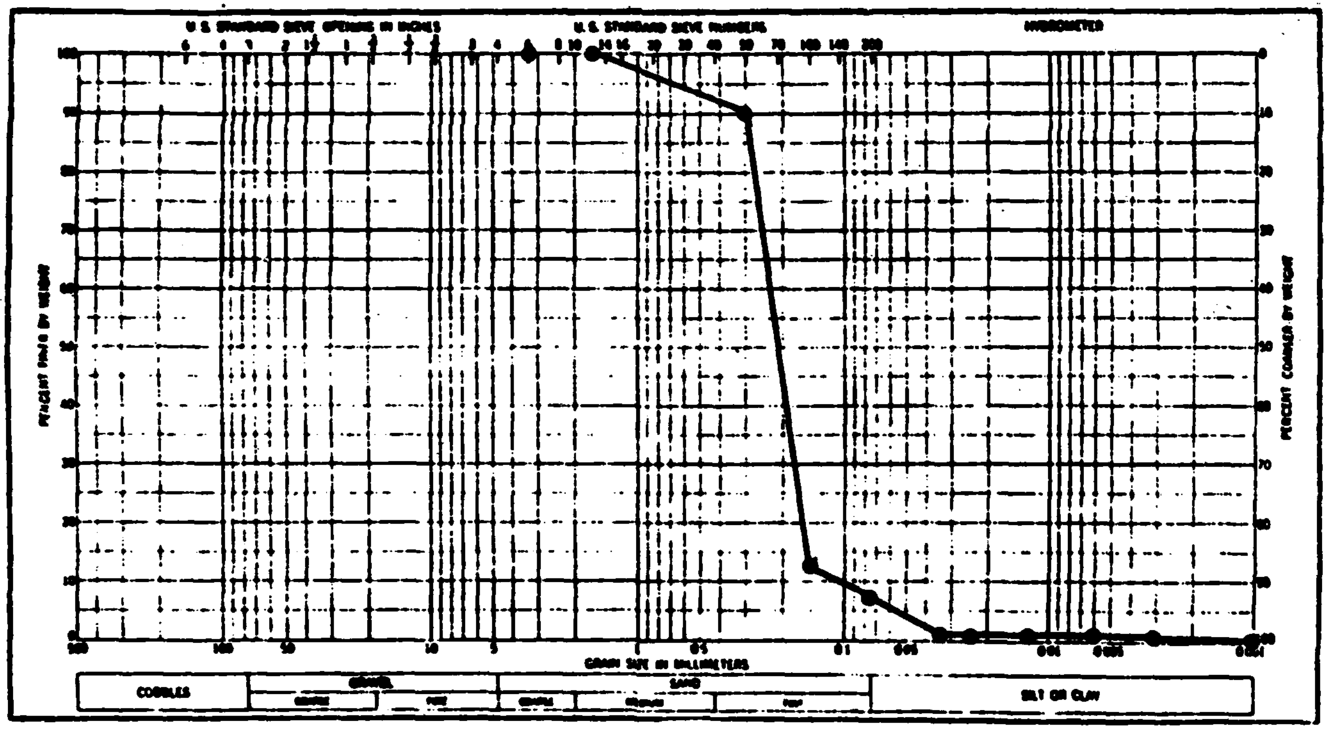
	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	5

FIGURE L-1f. SEDIMENT GRADATION CURVE, STATION 6, CYCLE 5, AUGUST 13-16, 1979.



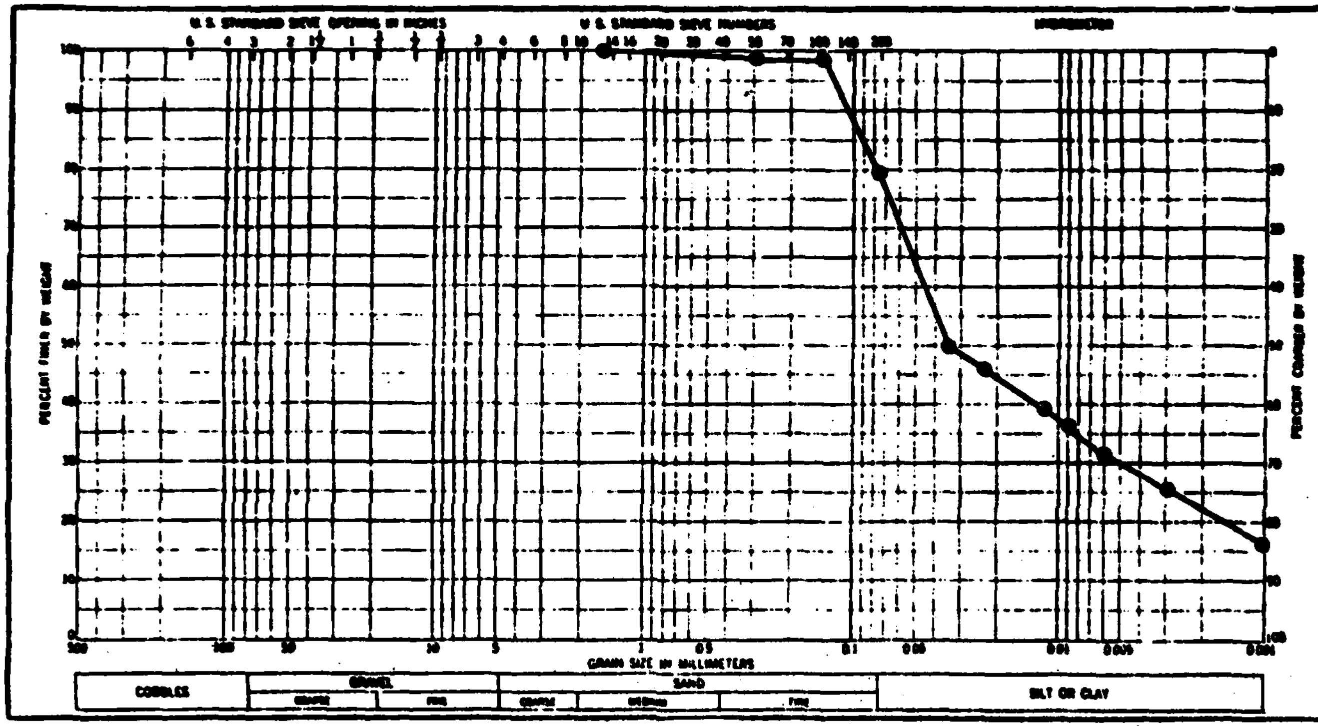
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank lk. upstream)	Depth (M)
	50%	5

FIGURE L-1g. SEDIMENT GRADATION CURVE, STATION 7, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	6

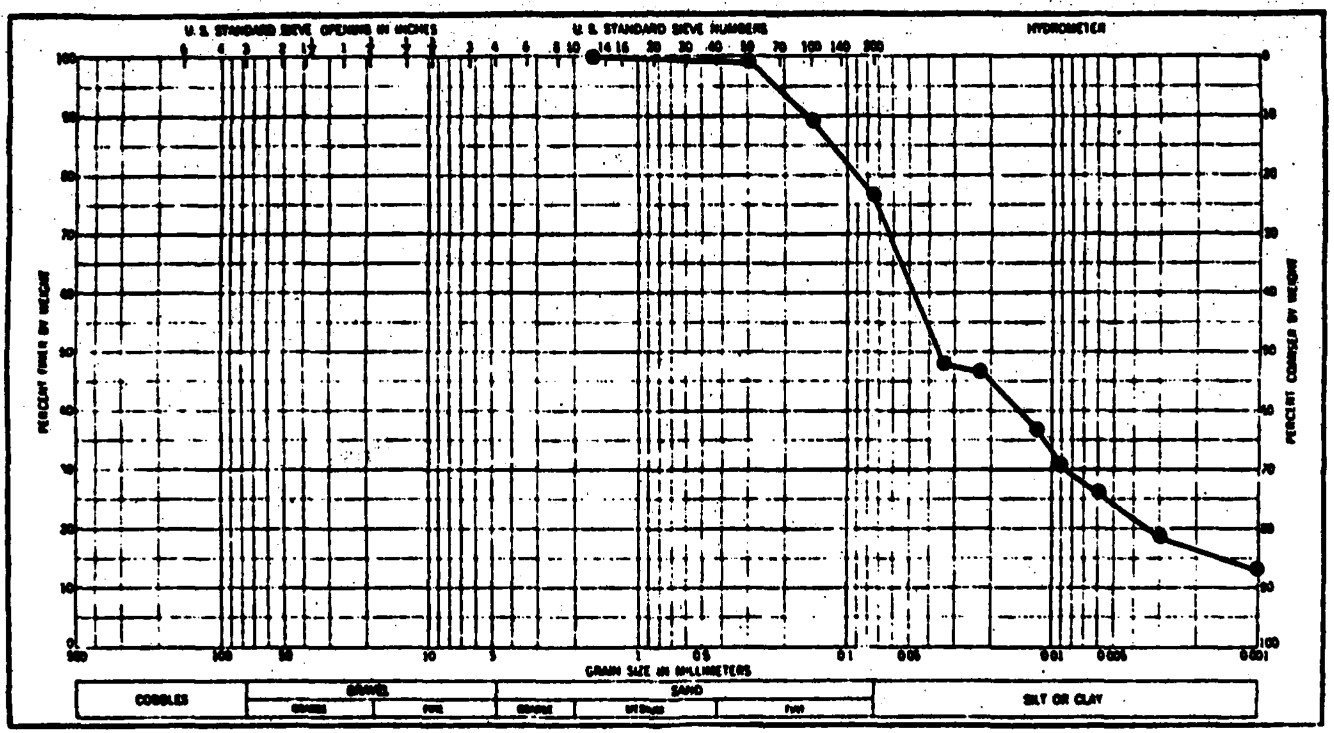
FIGURE L-1h. SEDIMENT GRADATION CURVE, STATION 8, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

X-Section (% from R-Bank 1k. upstream)	Depth (M)
50%	3

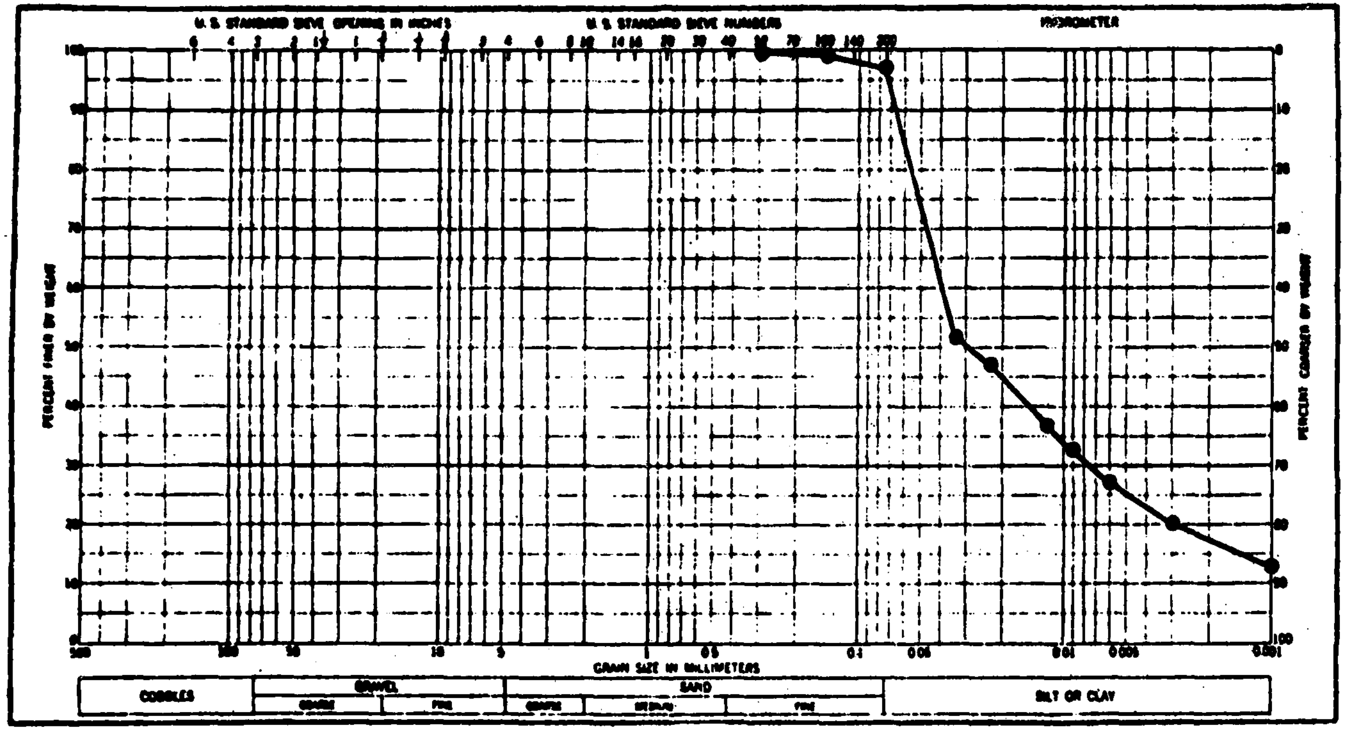
FIGURE L-11. SEDIMENT GRADATION CURVE, STATION 9, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

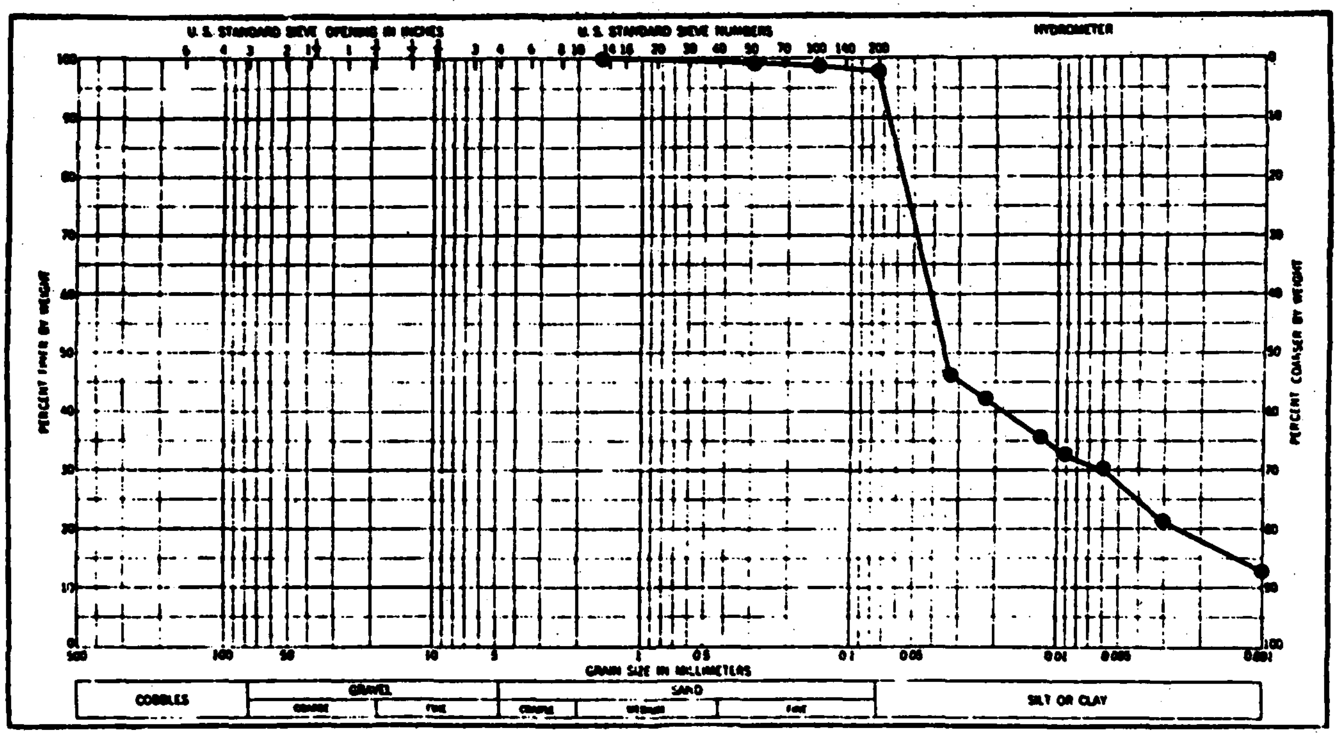
X-Section (% from R-Bank 1k. upstream)	Depth (M)
50%	4.5

FIGURE L-1j. SEDIMENT GRADATION CURVE, STATION 10, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	7

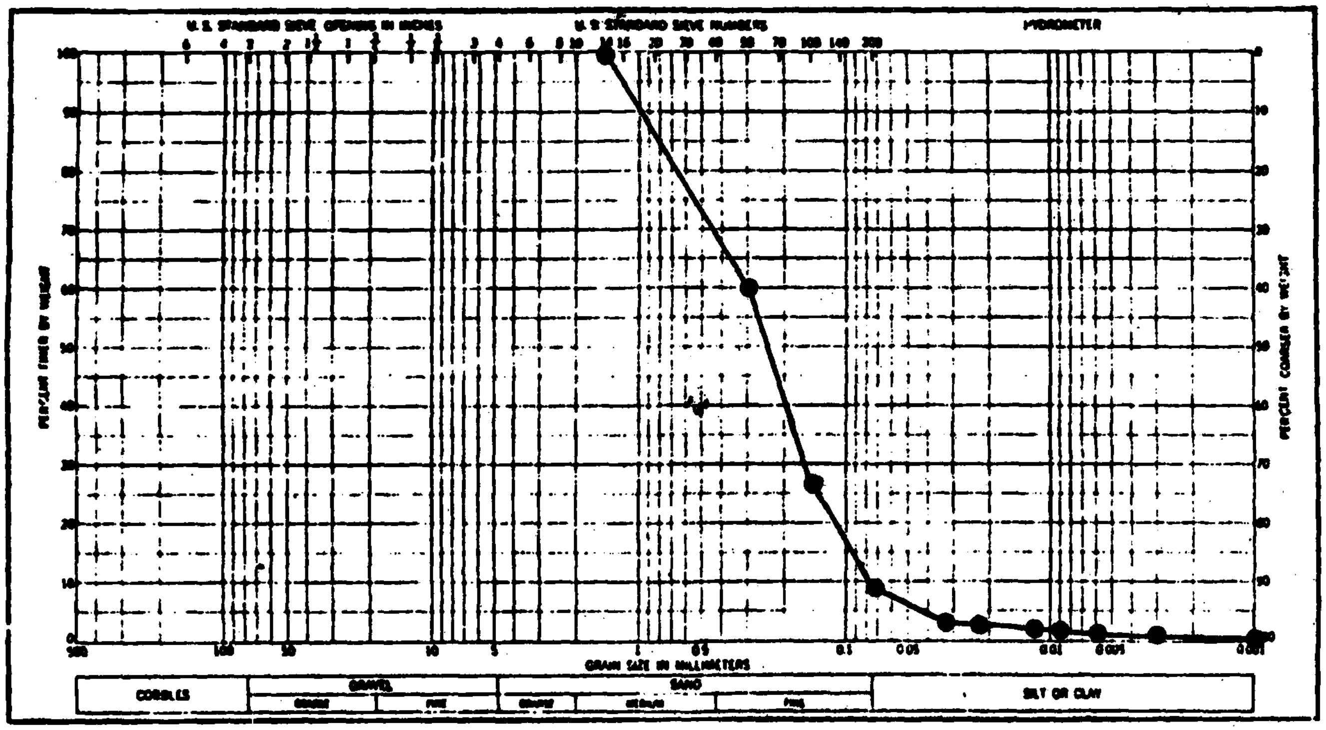
FIGURE L-1k. SEDIMENT GRADATION CURVE, STATION 11, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

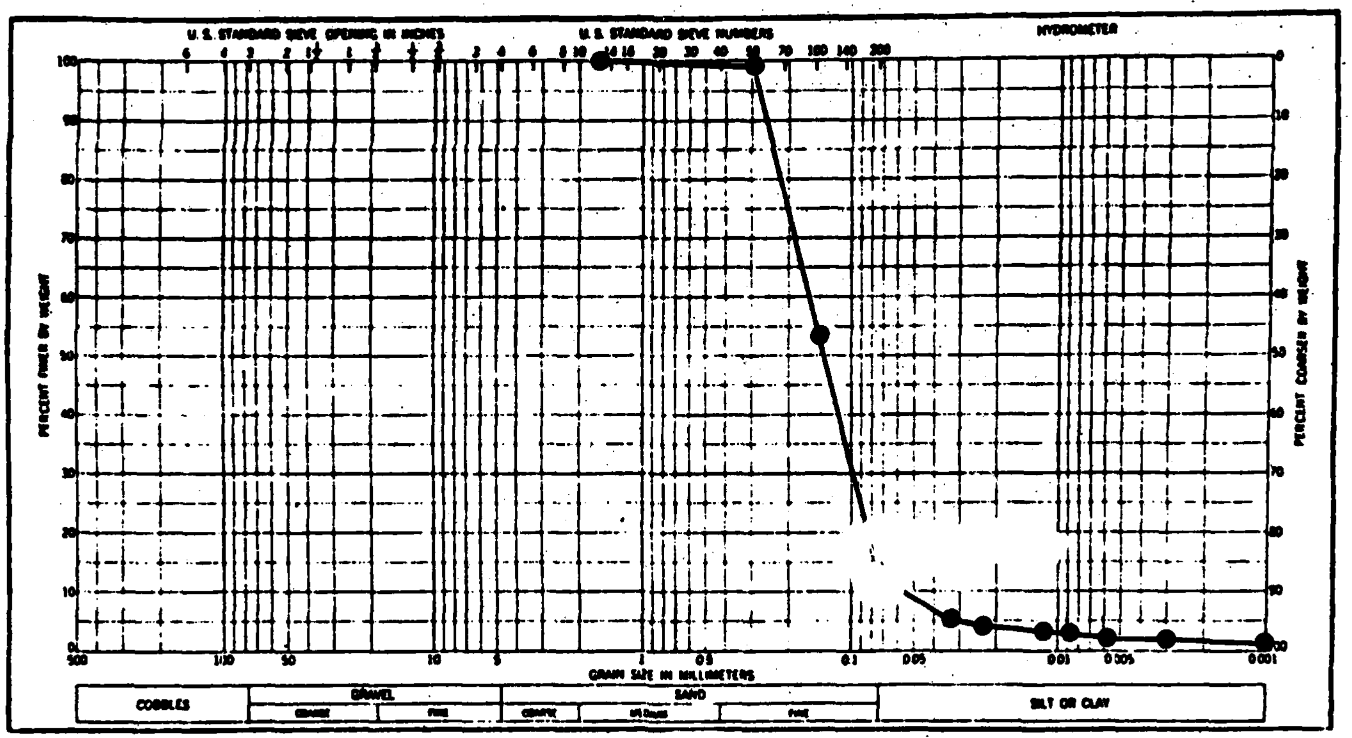
X-Section (% from R-Bank 1k. upstream)	Depth (M)
60%	5

FIGURE L-11. SEDIMENT GRADATION CURVE, STATION 12, CYCLE 5, AUGUST 13-16, 1979.



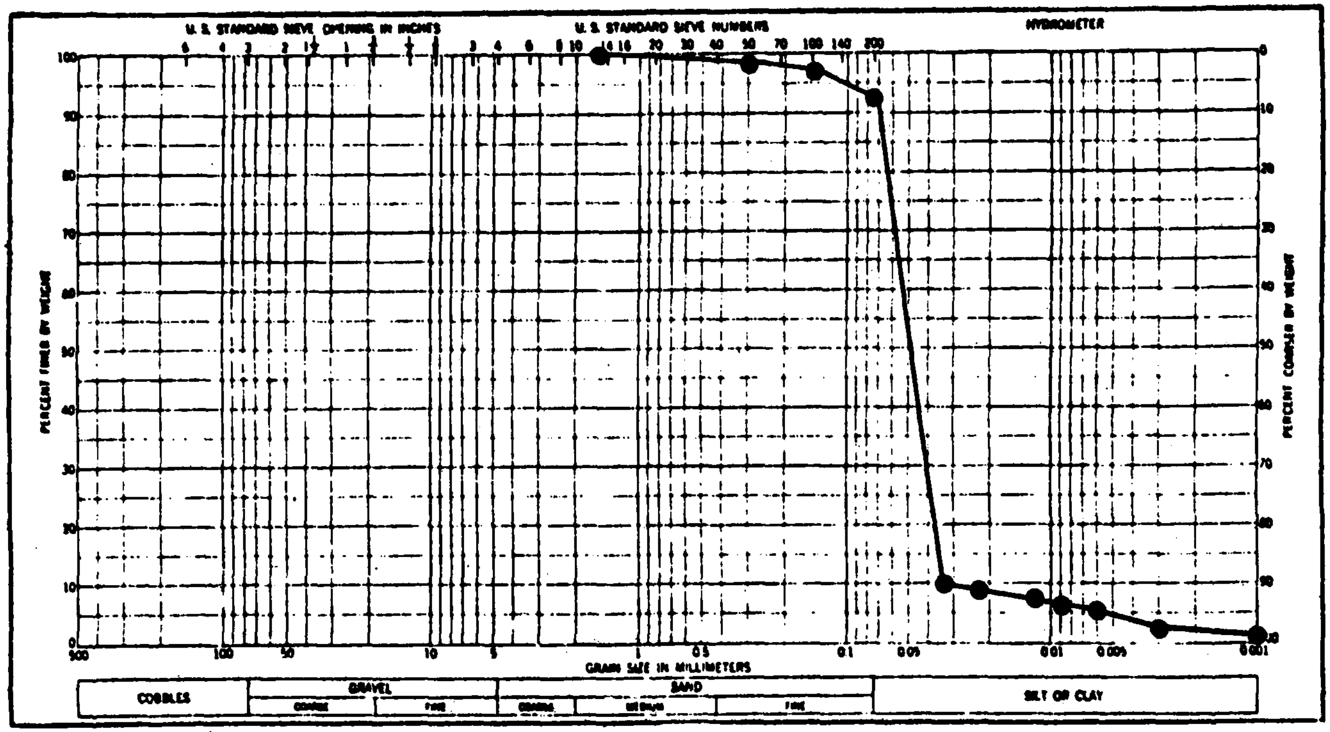
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank lk. upstream)	Depth (M)
	50%	1

FIGURE L-1m. SEDIMENT GRADATION CURVE, STATION 13, CYCLE 5, AUGUST 13-16, 1979.



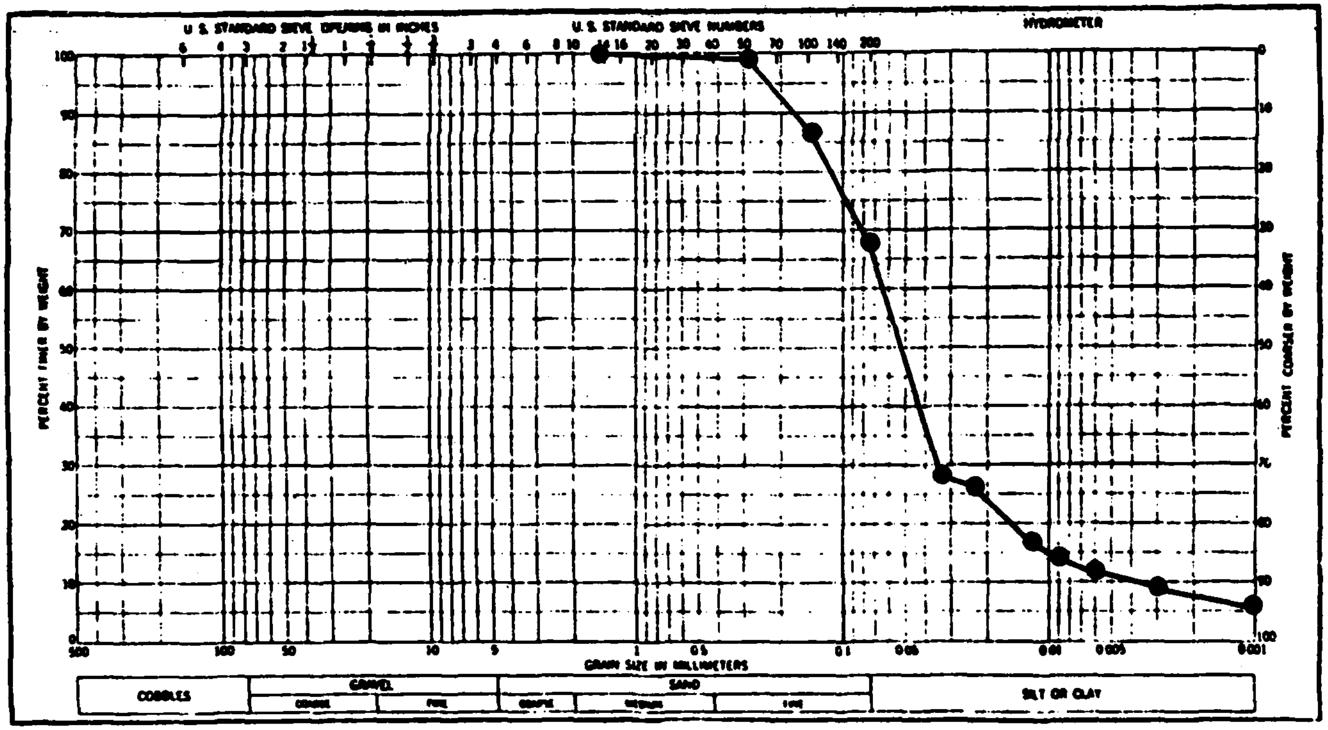
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	5

FIGURE L-1n. SEDIMENT GRADATION CURVE, STATION 14, CYCLE 5, AUGUST 13-16, 1979.



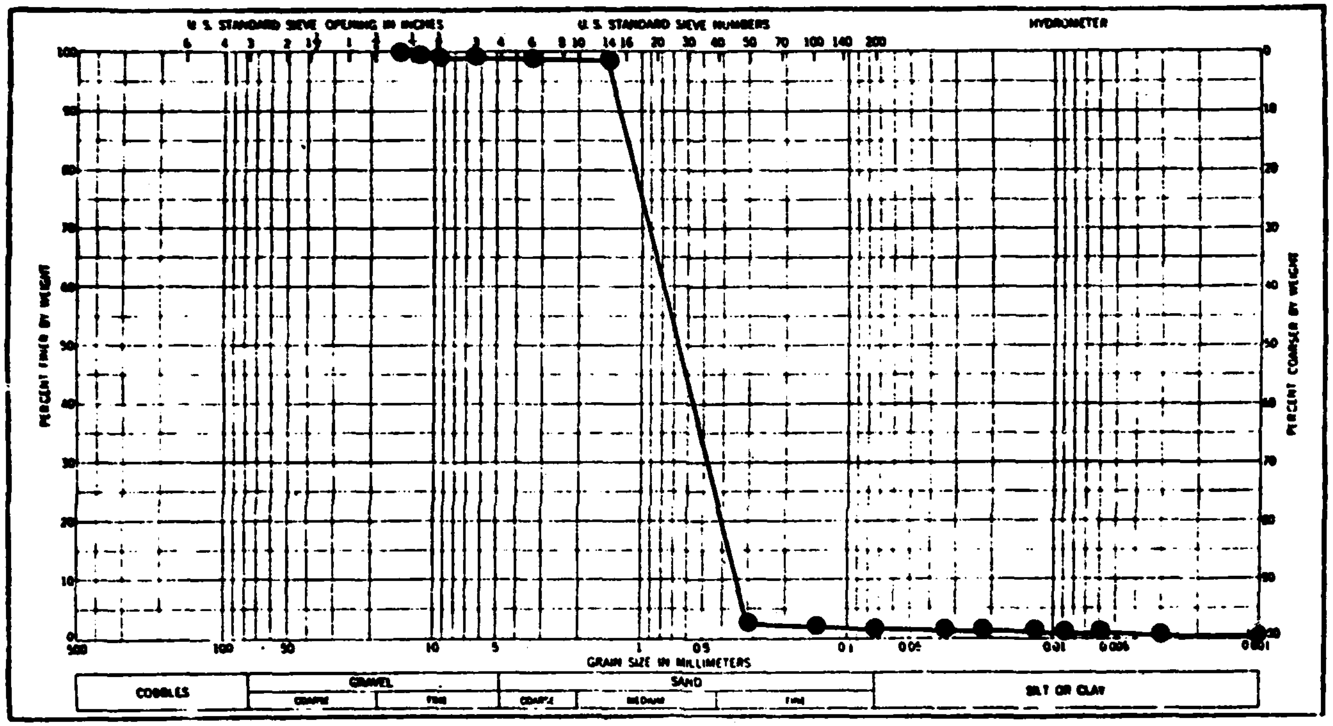
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	4

FIGURE L-1o. SEDIMENT GRADATION CURVE, STATION 15, CYCLE 5, AUGUST 13-16, 1979.



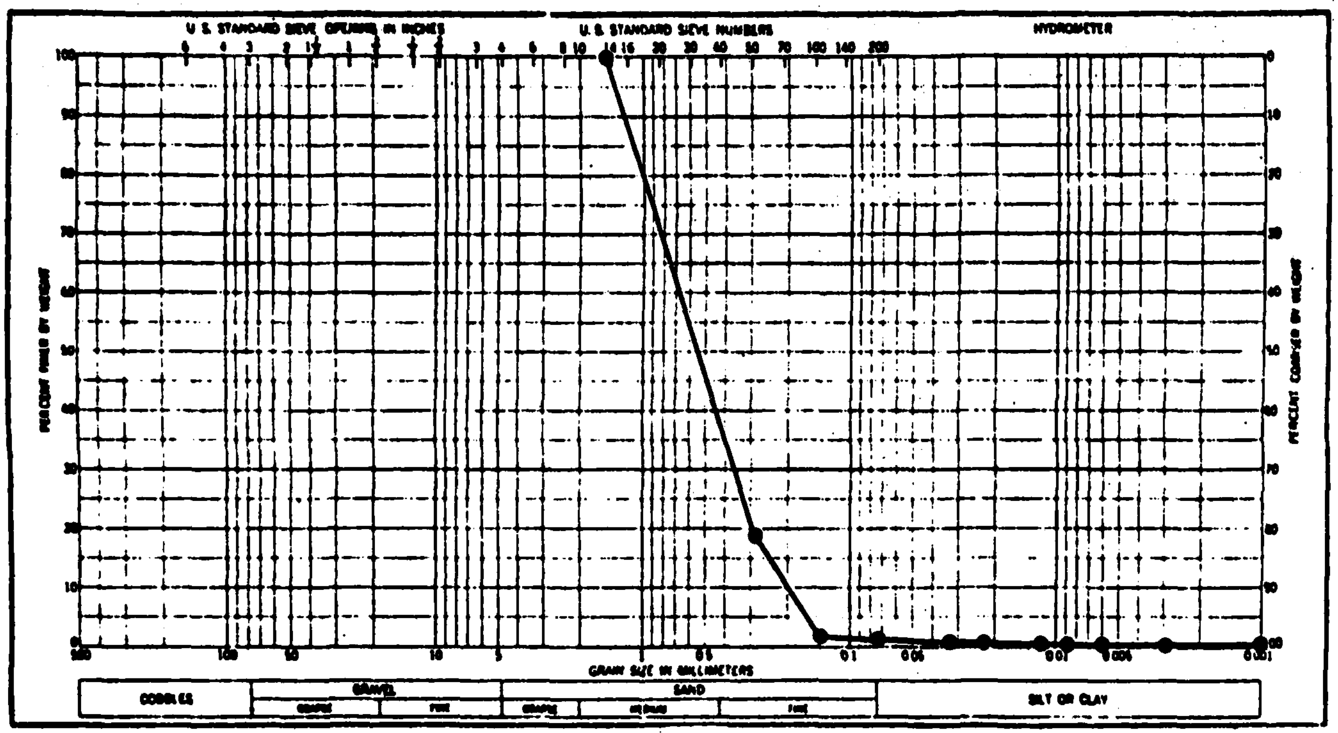
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	40%	5

FIGURE L-1p. SEDIMENT GRADATION CURVE, STATION 16, CYCLE 5, AUGUST 13-16, 1979.



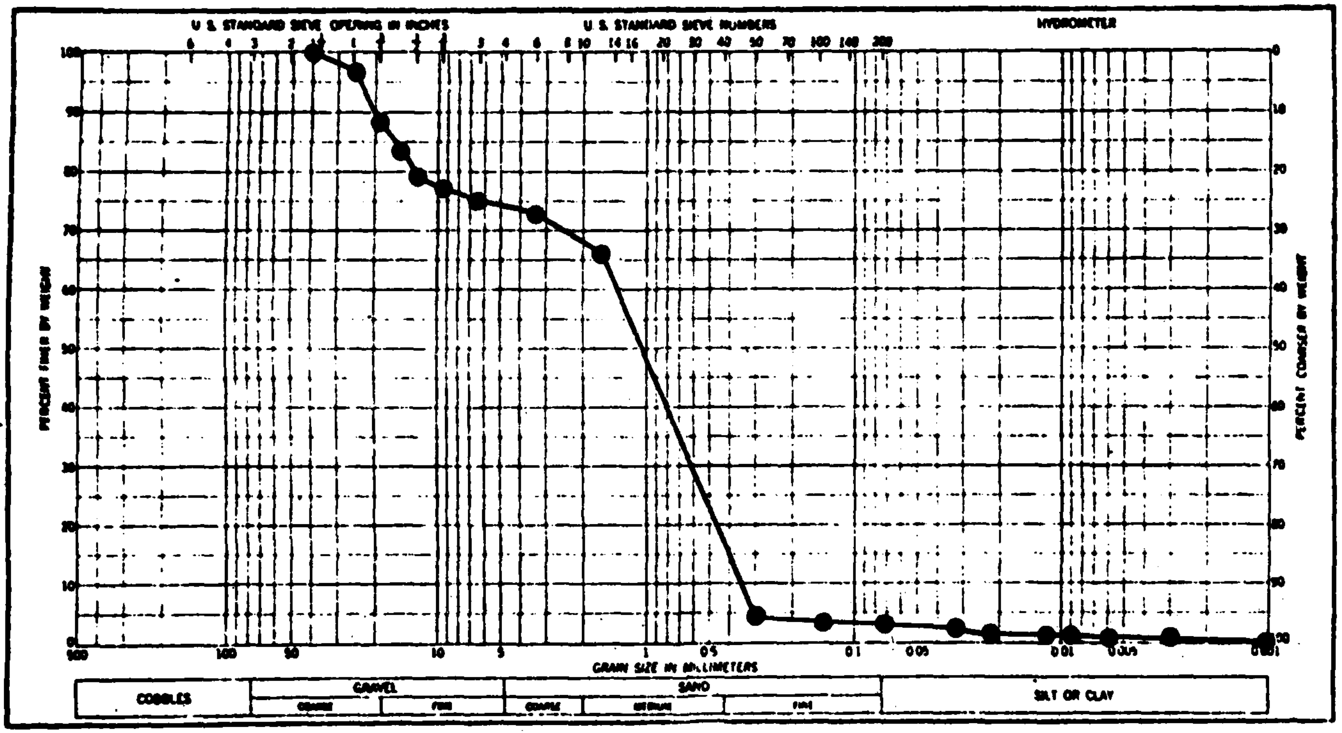
NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	5

FIGURE L-1q. SEDIMENT GRADATION CURVE, STATION 17, CYCLE 5, AUGUST 13-16, 1979.



NOTE:	Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank lk. upstream)	Depth (M)
		90%	7

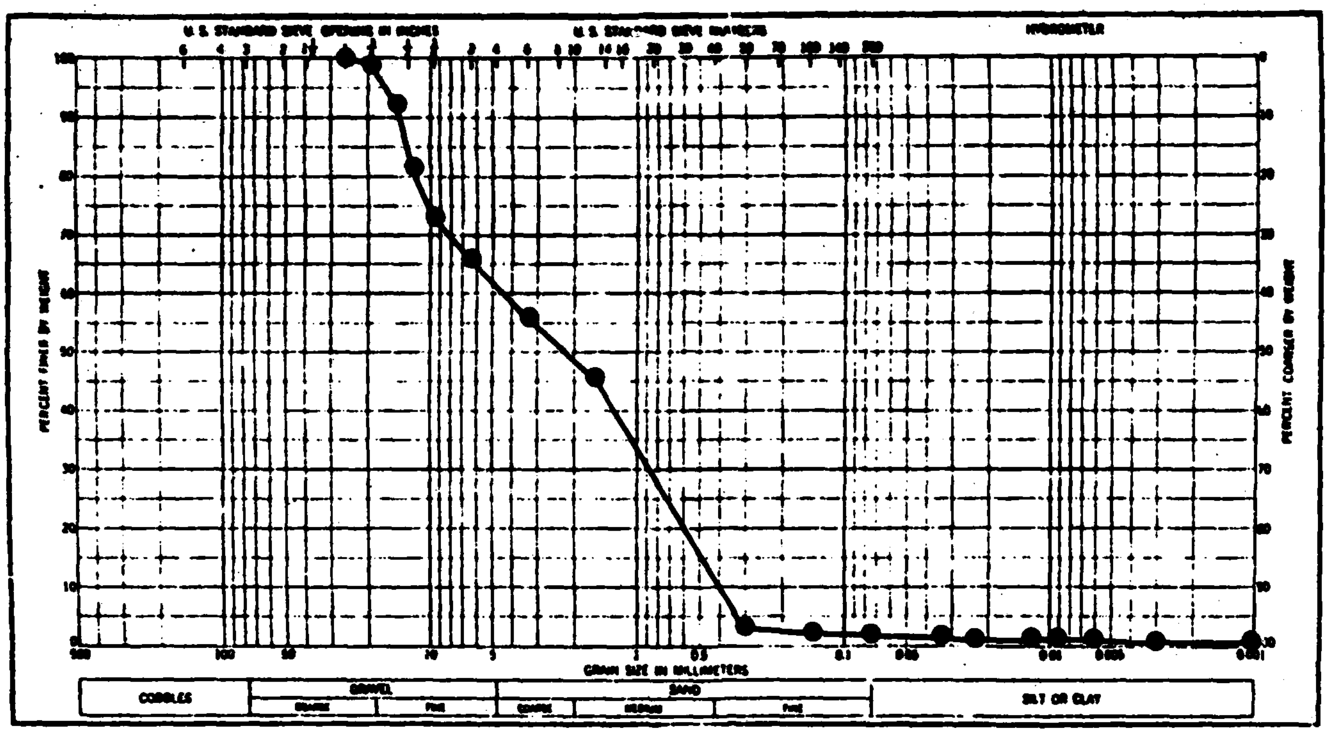
FIGURE L-1r. SEDIMENT GRADATION CURVE, STATION 18, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:

X-Section (% from R-Bank 1k. upstream)	Depth (M)
50%	4

FIGURE L-1s. SEDIMENT GRADATION CURVE, STATION 19, CYCLE 5, AUGUST 13-16, 1979.



NOTE: Surface sediment sample obtained with an epoxy coated ponar dredge at:	X-Section (% from R-Bank 1k. upstream)	Depth (M)
	50%	3.5

APPENDIX M

AQUATIC MACROPHYTES

LIST OF TABLES

TABLE M-1

AQUATIC MACROPHYTES NOTED TO BE COMMON TO ABUNDANT IN LAKE SEMINOLE DURING THE 1978 & 1979 FIELD SURVEYS

Algae	S*	E	F
Chara spp.; chara	x		
Lyngbya/*Spirogyra*; algal mat			x
Nitella spp.; nitella	x		
Vascular			
Justicia americana; water willow		x	
Sagittaria latifolia; common arrowhead		x	
Alternanthera philoxeroides; alligator-weed		x	
Colocasia esculenta; wild taro		x	
Orontium aquaticum; goldenclub		x	
Alnus serrulata; speckled alder		x	
Betula nigra; river birch		x	
Brasenia schreberi; watershield		x	
Cabomba caroliniana; fanwort	x		
Sphenoclea zeylandica; chicken spike		x	
Ceratophyllum demersum; common coontail	x		
Ceratophyllum echinatum; prickly coontail	x		
Mikania scandens; climbing hempweed		x	
Carex spp.; sedges		x	
Cyperus spp.; sedges		x	
Eleocharis acicularis; slender spikerush		x	
Eleocharis cellulosa; spikerush		x	
Eleocharis equisetodes; knotted spikerush		x	
Hydrochloa carolinensis; water grass		x	
Leersia hexandra; cutgrass		x	
Panicum hemitomum; maidencane		x	
Panicum repens; torpedograss		x	
Zizaniopsis miliaceae; giant cutgrass		x	
Hypericum spp.; St. Johns wort		x	
Myriophyllum brasiliense; parrotfeather	x		
Myriophyllum spicatum; Eurasian watermilfoil	x		
Egeria densa; elodea	x		
Hydrilla verticillata; hydrilla	x		
Vallisneria americana; eelgrass	x		
Juncus effusus; soft rush		x	
Juncus spp.; rushes		x	
Lemna perpusilla; common duckweed			x
Spirodela polyrhiza; giant duckweed			x

TABLE M-1 (continued)

	S	E	F
Utricularia floridana; giant bladderwort	x		
Utricularia inflata; purple bladderwort	x		
Utricularia purpurea; floating bladderwort	x		
Mayaca fluviatilis; bog moss	x		
Nymphoides aquaticum; banana lily		x	
Myrica cerifera; wax myrtle		x	
Najas guadalupensis; southern naiad	x		
Najas minor; naiad	x		
Nelumbo lutea; American lotus		x	
Nuphar advena; spatterdock		x	
Nymphaea odorata; fragrant waterlily		x	
Nyssa aquatica; swamp tupelo		x	
Nyssa ogeche; ogeche tupelo		x	
Ludwigia decurrens; singed waterprimrose		x	
Ludwigia leptocarpa; waterprimrose		x	
Ludwigia palustris; water purslane		x	
Ludwigia peruviana; waterprimrose		x	
Platanus occidentalis; sycamore		x	
Polygonum spp.; smartweeds		x	
Eichorrnia crassipes; water hyacinth			x
Pontedaria cordata; pickerelweed		x	
Pontedaria lanceolata; southern pickerelweed		x	
Potamogeton diversifolius; snailseed pondweed		x	
Potamogeton illinoiensis; Illinois pondweed	x		
Potamogeton nodosus; American pondweed		x	
Cephalanthus occidentalis; buttonbush		x	
Salix caroliniana; coastal plain willow		x	
Salix nigra; black willow		x	
Saururus cernuus; lizard's tail		x	
Bacopa caroliniana; water mint	x		
Sparganium americanum; burreed		x	
Taxodium ascendens; pond cypress		x	
Taxodium distichum; bald cypress		x	
Typha domingensis; southern cattail		x	
Typha latifolia; cattail		x	
Hydrocotyle ranunculoides; splitleaf pennywort			x
Xyris spp.; yellow-eyed grass		x	

* S = Submersed
E = Emergent
F = Floating

TABLE M-2

APPROXIMATE PERCENT COVER OF THE DOMINANT AQUATIC MACROPHYTES OBSERVED IN THE VARIOUS AREAS OF LAKE SEMINOLE 1978 & 1979

	S*	E	F
Chattahoochee River Area			
Egeria densa; egeria or elodea	P		
Zizaniopsis miliaceae; giant cutgrass		90	
Justicia americana; water willow		P	
Colocasia esculenta; wild taro		P	
Sphenoclea zeylandica; chicken spike		5	
Eichornnia crassipes; water hyacinth			P
Game Management Area			
Myriophyllum spicatum; Eurasian watermilfoil	75		
Myriophyllum brasiliensis; parrotfeather	5		
Cabomba caroliniana; fanwort	5		
Potamogeton illinoiense; Illinois pondweed	5		
Najas minor; naiad	5		
Najas quadalupensis; southern naiad	5		
Hydrilla verticillata; hydrilla	P		
Utricularia spp.; bladderworts	P		
Ceratophyllum demersum; common coontail	P		
Bacopa caroliniana; water mint	P		
Nymphaea odorata; fragrant water lily		5	
Brasenia schreiberi; water shield		5	
Polygonum spp.; smartweeds		P	
Pontedaria cordata; pickerelweed		P	
Panicum repens; torpedograss		5	
Panicum hemitomum; maidencane		5	
Leersia hexandra; cutgrass		5	
Eleocharis spp.; spikerushes		P	
Zizaniopsis miliaceae; giant cutgrass		10	
Eichornnia crassipes; water hyacinth			P
Hydrocotyle ranunculoides; splitleaf pennywort			P
Lemna perpusilla; common duckweed			P
Fish Pond Drain Area			
Hydrilla verticillata; Hydrilla	75		
Cabomba caroliniana; fanwort	P		
Najas spp; naiads	5		
Potamogeton illinoiense; Illinois pondweed	5		
Nitella sp.; nitella	P		
Panicum repens; torpedograss	P		

TABLE M-2 (continued)

	S	E	F
Panicum hemitomum; maidencane	P		
Leersia hexandra; cutgrass	P		
Typha spp.; cattails	P		
Nuphar advena; spatterdock		P	
Nymphaea odorata; fragrant water lily		P	
Brasenia schreiberi; watershield		P	
Nymphoides aquaticum; banana lily		P	
Nelumbo lutea; American lotus		P	
Turkey Pond Drain			
Hydrilla verticillata; hydrilla	70		
Potamogeton illinoiense; Illinois pondweed	15		
Myriophyllum brasiliense; Eurasian watermilfoil	5		
Limnophila sessiliflora; limnophila	P		
Chara sp.; chara	P		
Nitella sp.; nitella	P		
Typha spp.; cattails		P	
Panicum repens; torpedograss		P	
Panicum hemitomum; maidencane		P	
Leersia hexandra; cutgrass		P	
Pontedaria cordata; pickerelweed		P	
Eichorrnia crassipes; water hyacinth			P
Lake Seminole Island Area			
Myriophyllum spicatum; Eurasian watermilfoil	75		
Hydrilla verticillata; hydrilla	5		
Ceratophyllum demersum; coontail	5		
Potamogeton illinoiense; Illinois pondweed	10		
Chara spp.; chara	P		
Cabomba caroliniana; fanwort	P		
Typha spp.; cattails		5	
Zizaniopsis miliaceae; giant cutgrass		5	
Panicum repens; torpedograss		P	
Panicum hemitomum; maidencane		P	
Justicia americana; water willow		P	
Eleocharis spp.; spikerushes		P	
Pontedaria cordata; pickerelweed		P	
Nyssa spp.; tupelo		P	
Taxodium spp.; cypress		P	
Cephalanthus occidentalis; buttonbush		P	
Saururus cernuus; Lizard's-tail		P	
Nymphaea odorata; fragrant water lily		5	

TABLE M-2 (continued)

	S	E	F
Brasenia schreiberi; water shield		P	
Nymphoides aquaticum; banana lily		P	
Nelumbo lutea; American lotus		5	
Potamogeton nodosus; American pondweed		P	
Potamogeton diversifolius; snailseed pondweed		P	
Eichorrnia crassipes; water hyacinth			P
Lemna perpusilla; common duckweed			P
Lower Spring Creek Area			
Myriophyllum spicatum; Eurasian watermilfoil	75		
Potamogeton illinoiense; Illinois pondweed	20		
Typha spp.; cattails		P	
Leersia hexandra; cutgrass		P	
Nymphaea odorata; fragrant water lily		P	
Eichorrnia crassipes; water hyacinth			P
Spring Creek Area			
Myriophyllum spicatum; Eurasian watermilfoil	90		
Potamogeton illinoiense; Illinois pondweed	5		
Najas spp.; naiads	P		
Typha spp.; cattails		P	
Nuphar advena; spatterdock		P	
Ludwigia spp.; water primroses		P	
Eichorrnia crassipes; water hyacinth			P
Silver Lake Area			
Myriophyllum spicatum; Eurasian watermilfoil	75		
Hydrilla verticillata; hydrilla	5		
Najas spp.; naiads	5		
Potamogeton illinoiense; Illinois pondweed	5		
Typha spp.; cattails		P	
Zizaniopsis miliaceae; giant cutgrass		P	
Panicum repens; torpedograss		P	
Panicum hemitomum; maidencane		P	
Leersia hexandra; cutgrass		P	
Eichorrnia crassipes; water hyacinth			P
Hydrocotyle ranunculoides; splitleaf pennywort			P
Flint River Area			
Myriophyllum spicatum; Eurasian watermilfoil	P		
Myriophyllum brasiliense; parrotfeather	P		
Najas spp.; naiads	P		

TABLE M-2 (Continued)

	S	E	F
Lyngbya-Spyrogyra algal mats	10		
Zizaniopsis miliaceae; giant cutgrass		5	
Typha spp.; cattails		P	
Alternanthera philoxeroides; alligatorweed		P	
Eichorrnia crassipes; water hyacinth			5
Hydrocotyle ranunculoides; splitleaf pennywort			P
Lemna perpusilla; common duckweed			P
Spirodela polyrhiza; giant duckweed			P

*S = Submerged
E = Emergent
F = Floating

APPENDIX N

SPIKED SAMPLE RECOVERIES

LIST OF TABLES

TABLE N-1

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-73-C-0101)
PHASE II, CYCLE 1
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	14	50	15	81	132
	16	50	20	65	90
Iron, Dissolved (μg Fe/l)	14	50	79	132	104
	16	50	203	255	103
Iron, Total (μg Fe/l)	14	200	436	658	111
	16	200	1300	1490	98
Manganese, Dissolved (μg Mn/l)	14	50	<6	71	142
	16	50	36	67	82
Manganese, Total (μg Mn/l)	14	50	17	68	102
	16	50	37	88	102

TABLE N-2

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 2
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	9	44	50	98	109
	15	44	157	210	120
Iron, Dissolved (μg Fe/l)	9	50	224	276	104
	15	50	200	301	202
Iron, Total (μg Fe/l)	9	150	1235	1258	15
	15	150	983	1240	171
Manganese, Dissolved (μg Mn/l)	9	48	25	86	127
	15	48	<6	93	>181
Manganese, Total (μg Mn/l)	9	48	73	118	94
	15	48	62	118	117

TABLE N-3

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 3
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	4	50	12	62.0	100.0
	11	50	7	56.0	98.2
Iron, Dissolved (μg Fe/l)	4	50	107	153.0	97.5
	11	50	221	274.0	101.1
Iron, Total (μg Fe/l)	4	750	1580	2250.0	96.5
	11	750	851	1590.0	99.3
Manganese, Dissolved (μg Mn/l)	4	20	18	40.0	105.2
	11	20	6	20.5	102.5
Manganese, Total (μg Mn/l)	4	100	78	180.0	101.1
	11	100	42	156.0	109.9

TABLE N-4

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 4
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	9	50	37	87	100
	15	50	32	82	100
Iron, Dissolved (μg Fe/l)	9	50	99	141	84
	15	50	58	103	90
Iron, Total (μg Fe/l)	9	750	848	1630	104
	15	750	398	1200	107
Manganese, Dissolved (μg Mn/l)	9	20	<6	19	100
	15	20	12	31	95
Manganese, Total (μg Mn/l)	9	100	117	240	123
	15	100	60	150	90

TABLE N-5

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 5
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (µg Zn/l)	14	50	24	88	119
	16	50	35	82	96
Iron, Dissolved (µg Fe/l)	14	50	66	110	95
	16	50	120	170	108
Iron, Total (µg Fe/l)	14	750	373	1120	100
	16	750	540	1300	101
Manganese, Dissolved (µg Mn/l)	14	20	13	25	70
	16	20	<6	14	78
Manganese, Total (µg Mn/l)	14	100	38	153	111
	16	100	63	180	110

TABLE N-6

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 6
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	11 S	50	13	55	84
	4		<2	70	140
Iron, Dissolved (μg Fe/l)	11 S	50	50	100	100
	4		21	69	96
Iron, Total (μg Fe/l)	11 S	750	1510	2260	100
	4		435	1290	114
Manganese, Dissolved (μg Mn/l)	11 S	20	<6	17	85
	4		<6	16	80
Manganese, Total (μg Mn/l)	11 S	100	81	186	105
	4		30	162	132

TABLE N-7

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
CORPS OF ENGINEERS (CONTRACT DACW01-78-C-0101)
PHASE II, CYCLE 7
SPIKED SAMPLE RECOVERIES

Parameter	Station Number	Spike Value	Analytical Results		
			Sample	Spiked Sample	% Recovery
Zinc, Total (μg Zn/l)	15	50	38	80	84
	9	50	43	78	70
Iron, Dissolved (μg Fe/l)	15	50	318	369	102
	9	50	41	100	118
Iron, Total (μg Fe/l)	15	750	1290	1800	100
	9	750	877	1370	100
Manganese, Dissolved (μg Mn/l)	15	20	12	41	145
	9	20	<6	30	120
Manganese, Total (μg Mn/l)	15	100	55	149	96
	9	100	58	159	101

APPENDIX O

MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES

LIST OF TABLES

TABLE 0-1a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 4, AUG. 14-17, 1978

Ionic Species	Station 01		Station 02		Station 03		Station 04	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.1	0.205	6.0	0.299	5.1	0.254	6.0	0.299
Magnesium (mg)	2.8	0.231	3.0	0.247	2.6	0.214	3.9	0.321
Potassium (K)	1.6	0.041	1.6	0.041	1.6	0.041	1.6	0.041
Sodium (Na)	4.37	0.190	4.27	0.186	4.37	0.190	5.93	0.258
Alkalinity ($CaCO_3$)	18.0	0.360	17.0	0.340	17.0	0.340	20.0	0.400
Sulfate (SO_4)	5.0	0.104	6.0	0.125	5.0	0.104	8.0	0.166
Chloride (Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.666		0.773		0.699		0.919	
ΣAnions =	0.577		0.578		0.557		0.679	
% Difference =	7.2		14.4		11.3		15.0	
Hardness =	21.0		26.0		23.0		30.0	

Ionic Species	Station 05		Station 06		Station 07		Station 08	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.3	0.215	4.3	0.215	7.4	0.369	7.9	0.394
Magnesium (mg)	4.1	0.337	1.0	0.082	2.5	0.206	2.6	0.214
Potassium (K)	1.6	0.041	1.7	0.044	1.6	0.041	1.4	0.036
Sodium (Na)	5.23	0.228	5.07	0.221	5.07	0.221	5.20	0.226
Alkalinity ($CaCO_3$)	20.0	0.400	21.0	0.420	21.0	0.420	22.0	0.440
Sulfate (SO_4)	7.0	0.146	6.0	0.125	6.0	0.125	6.0	0.125
Chloride(Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.821		0.561		0.836		0.870	
ΣAnicns =	0.658		0.658		0.658		0.678	
% Difference =	10.0		7.9		12.0		12.4	
Hardness =	27.0		14.0		28.0		29.0	

TABLE O-1b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 4, AUG. 14-17, 1978

Ionic Species	Station 08		Station 09		Station 09		Station 10	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.4	0.220	7.3	0.364	6.6	0.329	5.2	0.259
Magnesium (mg)	2.9	0.238	2.7	0.222	2.7	0.222	3.2	0.263
Potassium (K)	1.4	0.036	1.4	0.036	1.4	0.036	1.6	0.410
Sodium (Na)	5.20	0.226	4.27	0.186	3.97	0.173	4.33	0.188
Alkalinity ($CaCO_3$)	22.0	0.440	21.0	0.420	21.0	0.420	19.0	0.380
Sulfate (SO_4)	5.0	0.104	6.0	0.125	5.0	0.104	5.0	0.104
Chloride (Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.720		0.808		0.760		0.752	
ΣAnions =	0.657		0.658		0.637		0.597	
% Difference =	4.6		10.2		8.8		11.5	
Hardness =	22.0		28.0		27.0		25.0	

Ionic Species	Station 11		Station 11		Station 12		Station 13	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	5.2	0.259	5.0	0.250	9.6	0.479	10.9	0.544
Magnesium (mg)	2.4	0.197	2.7	0.222	0.2	0.016	3.5	0.288
Potassium (K)	1.3	0.033	1.6	0.041	0.1	0.003	0.9	0.023
Sodium (Na)	4.0	0.174	4.47	0.194	1.15	0.050	3.13	0.136
Alkalinity ($CaCO_3$)	29.0	0.580	20.0	0.400	32.0	0.640	45.0	0.9
Sulfate (SO_4)	5.0	0.104	5.0	0.104	1.0	0.021	2.0	0.042
Chloride (Cl)	4.0	0.113	4.0	0.113	3.0	0.085	4.0	0.113
ΣCations =	0.664		0.707		0.548		0.991	
ΣAnions =	0.797		0.617		0.745		1.054	
% Difference =	9.1		6.8		15.3		3.1	
Hardness =	22.0		23.0		24.0		46.0	

TABLE O-1C

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 4, AUG. 14-17, 1978

Ionic Species	Station 13		Station 14		Station 15		Station 15	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	11.6	0.579	13.7	0.684	10.8	0.539	10.4	0.519
Magnesium (mg)	3.6	0.296	1.2	0.099	7.5	0.617	7.3	0.600
Potassium (K)	0.9	0.023	0.6	0.015	1.1	0.028	1.1	0.028
Sodium (Na)	3.07	0.134	1.45	0.063	3.27	0.142	3.27	0.142
Alkalinity ($CaCO_3$)	46.0	0.920	48.0	0.960	40.0	0.800	42.0	0.840
Sulfate (SO_4)	1.0	0.021	3.0	0.062	<1.0	0.021	2.0	0.042
Chloride (Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	1.031		0.861		1.326		1.289	
ΣAnions	1.054		1.135		0.934		0.994	
% Difference =	1.1		13.8		17.4		12.9	
Hardness =	42.0		38.0		56.0		54.0	

Ionic Species	Station 16		Station 17		Station 18		Station 19	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	6.4	0.319	6.2	0.309	13.0	0.649	15.3	0.763
Magnesium (mg)	1.6	0.132	1.6	0.132	2.5	0.206	2.8	0.230
Potassium (K)	1.1	0.028	1.2	0.031	1.1	0.028	1.1	0.028
Sodium (Na)	3.30	0.144	3.30	0.144	3.87	0.168	3.59	0.156
Alkalinity ($CaCO_3$)	25.0	0.500	25.0	0.500	33.0	0.660	38.0	0.760
Sulfate (SO_4)	3.0	0.062	2.0	0.042	5.0	0.104	4.0	0.083
Chloride (Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.623		0.615		1.051		1.178	
ΣAnions =	0.675		0.654		0.877		0.956	
% Difference =	4.1		3.090		9.0		10.4	
Hardness =	22.0		21.0		41.0		48.0	

TABLE 0-2a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 6, NOV. 28-30, 1978

Ionic Species	Station 01		Station 02		Station 03		Station 04	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	3.0	0.150	3.8	0.190	4.3	0.215	3.9	0.195
Magnesium (mg)	1.1	0.090	1.1	0.090	1.2	0.099	1.2	0.099
Potassium (K)	2.4	0.061	2.3	0.059	2.2	0.036	2.2	0.056
Sodium (Na)	6.08	0.264	5.72	0.249	5.55	0.241	5.55	0.241
Alkalinity ($CaCO_3$)	16.0	0.320	16.0	0.320	16.0	0.320	16.0	0.320
Sulfate (SO_4)	7.0	0.146	7.0	0.146	7.0	0.146	7.0	0.146
Chloride (Cl)	3.0	0.085	5.0	0.141	5.0	0.141	5.0	0.141
ΣCations =	0.566		0.588		0.611		0.591	
ΣAnions =	0.550		0.607		0.607		0.607	
% Difference =	1.4		1.6		0.4		1.3	
Hardness =	12.0		13.0		15.0		14.0	

Ionic Species	Station 05		Station 06		Station 07		Station 07	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.8	0.240	4.0	0.200	5.9	0.294	5.4	0.269
Magnesium (mg)	1.3	0.107	1.8	0.148	1.3	0.107	1.4	0.115
Potassium (K)	2.6	0.666	2.4	0.061	2.8	0.072	2.8	0.072
Sodium (Na)	10.90	0.474	10.00	0.435	12.40	0.539	12.70	0.552
Alkalinity ($CaCO_3$)	26.0	0.520	26.0	0.520	29.0	0.580	31.0	0.620
Sulfate (SO_4)	12.0	0.250	11.0	0.229	13.0	0.270	12.0	0.250
Chloride (Cl)	3.0	0.085	5.0	0.141	5.0	0.141	5.0	0.141
ΣCations =	0.887		0.844		1.012		1.009	
ΣAnions =	0.854		0.890		0.991		1.011	
% Difference =	1.9		2.6		1.0		0.1	
Hardness =	17.0		17.0		19.0		18.0	

TABLE 0-2b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 6, NOV. 28-30, 1978

Ionic Species	Station 08		Station 09		Station 09		Station 10	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	5.1	0.254	5.9	0.294	6.9	0.344	5.0	0.250
Magnesium (mg)	1.3	0.107	1.2	0.099	1.3	0.107	1.3	0.107
Potassium (K)	2.8	0.072	2.5	0.064	2.5	0.064	2.4	0.061
Sodium (Na)	13.40	0.583	8.59	0.374	9.48	0.412	8.05	0.350
Alkalinity ($CaCO_3$)	33.0	0.660	31.0	0.620	30.0	0.600	25.0	0.500
Sulfate (SO_4)	15.0	0.312	11.0	0.229	11.0	0.229	8.0	0.166
Chloride (Cl)	5.0	0.141	4.0	0.113	4.0	0.113	6.0	0.169
ΣCations =	1.016		0.831		0.928		0.768	
ΣAnions =	1.113		0.962		0.942		0.836	
% Difference =	4.6		7.3		0.752		4.2	
Hardness =	17.0		19.0		22.0		17.0	

Ionic Species	Station 11		Station 11		Station 13		Station 13	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	8.3	0.414	8.2	0.409	15.1	0.753	15.8	0.788
Magnesium (mg)	1.2	0.099	1.3	0.107	1.2	0.099	1.2	0.099
Potassium (K)	2.1	0.054	2.1	0.054	1.0	0.026	0.9	0.023
Sodium (Na)	7.98	0.347	7.95	0.346	4.01	0.174	4.15	0.181
Alkalinity ($CaCO_3$)	37.0	0.740	35.0	0.700	59.0	1.180	59.0	1.18
Sulfate (SO_4)	8.0	0.166	8.0	0.166	4.0	0.083	2.0	0.042
Chloride(Cl)	6.0	0.169	5.0	0.141	6.0	0.169	5.0	0.141
ΣCations =	0.914		0.916		1.052		1.091	
ΣAnions =	1.076		1.077		1.432		1.363	
% Difference =	8.1		4.8		15.3		11.1	
Hardness =	25.0		25.0		41.0		43.0	

TABLE 0-2c

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE I, CYCLE 6, NOV. 28-30, 1978

Ionic Species	Station 14		Station 15		Station 15		Station 16	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	15.9	0.793	17.8	0.888	14.4	0.719	13.6	0.679
Magnesium (mg)	0.7	0.058	1.2	0.099	1.1	0.090	0.9	0.074
Potassium (K)	0.7	0.018	0.9	0.023	1.0	0.026	0.8	0.020
Sodium (Na)	1.14	0.050	4.29	0.187	4.22	0.184	3.94	0.171
Alkalinity ($CaCO_3$)	64.0	1.280	53.0	1.060	53.0	1.060	53.0	1.060
Sulfate (SO_4)	6.0	0.125	3.0	0.062	3.0	0.062	2.0	0.042
Chloride (Cl)	3.0	0.085	5.0	0.141	6.0	0.169	4.0	0.113
ΣCations =	0.918		1.197		1.018		0.944	
ΣAnions =	1.489		1.263		1.292		1.214	
% Difference =	23.7		2.7		11.8		12.5	
Hardness =	41.0		47.0		39.0		36.0	

Ionic Species	Station 17		Station 18		Station		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	16.3	0.813	14.2	0.789				
Magnesium (mg)	0.9	0.074	1.3	0.107				
Potassium (K)	1.0	0.026	1.6	0.041				
Sodium (Na)	4.40	0.191	6.26	0.272				
Alkalinity ($CaCO_3$)	55.0	1.100	47.0	0.940				
Sulfate (SO_4)	2.0	0.042	1.0	0.021				
Chloride (Cl)	6.0	0.169	5.0	0.141				
ΣCations =	1.104		1.129					
ΣAnions =	1.311		1.102					
% Difference =	8.5		1.2					
Hardness =	43.0		39.0					

TABLE O-3a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 1, FEB. 19-22, 1979

Ionic Species	Station 01		Station 02		Station 03		Station 04	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.5	0.225	4.3	0.215	4.8	0.240	4.9	0.245
Magnesium (mg)	1.4	0.115	1.4	0.115	1.4	0.115	1.4	0.115
Potassium (K)	2.3	0.059	2.5	0.064	2.3	0.059	2.6	0.067
Sodium (Na)	4.90	0.213	5.00	0.218	5.90	0.257	7.70	0.335
Alkalinity ($CaCO_3$)	11.0	0.220	12.0	0.240	12.0	0.240	14.0	0.280
Sulfate (SO_4)	7.0	0.146	7.0	0.146	7.0	0.146	9.0	0.187
Chloride (Cl)	5.0	0.141	4.0	0.113	5.0	0.141	5.0	0.141
ΣCations =	0.612		0.611		0.670		0.761	
ΣAnions =	0.507		0.498		0.527		0.608	
% Difference =	9.4		10.2		12.0		11.2	
Hardness =	16.0		16.0		17.0		17.0	

Ionic Species	Station 05		Station 06		Station 07		Station 08	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	5.7	0.284	5.0	0.250	7.4	0.369	7.1	0.354
Magnesium (mg)	1.4	0.115	1.4	0.115	1.3	0.107	1.3	0.107
Potassium (K)	2.6	0.067	2.3	0.059	1.1	0.028	1.8	0.046
Sodium (Na)	8.80	0.383	8.30	0.361	5.20	0.226	7.50	0.326
Alkalinity ($CaCO_3$)	19.0	0.380	15.0	0.300	33.0	0.660	30.0	0.600
Sulfate (SO_4)	12.0	0.250	11.0	0.229	9.0	0.187	12.0	0.250
Chloride (Cl)	4.0	0.113	5.0	0.141	7.0	0.197	6.0	0.169
ΣCations =	0.849		0.785		0.730		0.833	
ΣAnions =	0.742		0.670		1.045		1.019	
% Difference =	6.7		7.9		17.7		10.0	
Hardness =	19.0		18.0		23.0		22.0	

TABLE 0-3b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 1, FEB. 19-22, 1979

Ionic Species	Station 09		Station 10		Station 11		Station 12	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	5.0	0.250	4.6	0.230	6.2	0.309	11.5	0.574
Magnesium (mg)	1.4	0.115	1.4	0.115	1.2	0.099	1.1	0.090
Potassium (K)	2.2	0.056	2.2	0.056	1.6	0.041	1.3	0.033
Sodium (Na)	7.50	0.326	7.10	0.309	5.30	0.231	3.70	0.161
Alkalinity ($CaCO_3$)	23.0	0.460	24.0	0.480	27.0	0.540	40.0	0.800
Sulfate (SO_4)	9.0	0.187	10.0	0.208	2.0	0.042	2.0	0.042
Chloride (Cl)	3.0	0.085	6.0	0.169	4.0	0.113	4.0	0.113
ΣCations =	0.747		0.710		0.680		0.859	
ΣAnions =	0.731		0.852		0.694		0.954	
% Difference =	1.0		9.4		1.1		5.3	
Hardness =	18.0		17.0		20.0		32.0	

Ionic Species	Station 13		Station 14		Station 15		Station 16	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	7.3	0.364	20.8	1.038	8.1	0.404	10.9	0.544
Magnesium (mg)	1.1	0.090	0.8	0.066	1.1	0.090	1.1	0.090
Potassium (K)	1.4	0.036	0.6	0.015	1.4	0.036	1.6	0.041
Sodium (Na)	2.60	0.113	3.40	0.148	2.70	0.117	3.00	0.131
Alkalinity ($CaCO_3$)	24.0	0.480	78.0	1.560	31.0	0.620	36.0	0.720
Sulfate (SO_4)	4.0	0.083	1.0	0.021	4.0	0.083	4.0	0.083
Chloride (Cl)	6.0	0.169	5.0	0.141	6.0	0.169	7.0	0.197
ΣCations =	0.604		1.267		0.648		0.806	
ΣAnions =	0.732		1.722		0.872		1.001	
% Difference =	9.6		15.2		14.8		10.8	
Hardness =	22.0		53.0		24.0		30.0	

TABLE 0-3c

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 1, FEB. 19-22, 1979

Ionic Species	Station 17		Station 18		Station 19		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	10.8	0.539	6.3	0.314	6.4	0.319		
Magnesium (mg)	1.0	0.082	1.3	0.107	1.4	0.115		
Potassium (K)	1.2	0.031	1.7	0.044	1.8	0.046		
Sodium (Na)	2.10	0.091	5.00	0.218	5.40	0.235		
Alkalinity ($CaCO_3$)	37.0	0.740	26.0	0.520	25.0	0.500		
Sulfate (SO_4)	4.0	0.083	6.0	0.125	6.0	0.125		
Chloride (Cl)	5.0	0.141	4.0	0.113	4.0	0.113		
ΣCations =	0.743		0.682		0.715			
ΣAnions =	0.964		0.758		0.738			
% Difference =	12.9		5.2		1.5			
Hardness =	30.0		20.0		21.0			

Ionic Species	Station		Station		Station		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)								
Magnesium (mg)								
Potassium (K)								
Sodium (Na)								
Alkalinity ($CaCO_3$)								
Sulfate (SO_4)								
Chloride (Cl)								
ΣCations =								
ΣAnicns =								
% Difference =								
Hardness =								

TABLE 0-4a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 5, AUG. 13-16, 1979

Ionic Species	Station 01		Station 02		Station 03		Station 04	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	3.7	0.185	4.1	0.205	4.2	0.210	3.8	0.190
Magnesium (mg)	1.5	0.123	1.6	0.132	1.5	0.123	1.4	0.115
Potassium (K)	1.9	0.049	2.0	0.051	1.9	0.049	2.0	0.051
Sodium (Na)	5.90	0.257	5.00	0.218	5.00	0.218	5.80	0.252
Alkalinity ($CaCO_3$)	17.0	0.340	18.0	0.360	22.0	0.440	12.0	0.240
Sulfate (SO_4)	4.0	0.083	4.0	0.083	5.0	0.104	5.0	0.104
Chloride (Cl)	4.0	0.113	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.613		0.605		0.599		0.608	
ΣAnions =	0.536		0.556		0.657		0.457	
% Difference =	6.72		4.2		4.6		14.2	
Hardness =	15.0		16.0		16.0		15.0	

Ionic Species	Station 05		Station 06		Station 07s		Station 07b	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	4.0	0.200	7.3	0.364	8.8	0.439	4.9	0.245
Magnesium (mg)	1.4	0.115	1.6	0.132	1.6	0.132	1.5	0.123
Potassium (K)	1.9	0.049	2.0	0.051	2.0	0.051	1.8	0.046
Sodium (Na)	8.70	0.378	7.70	0.335	4.00	0.174	3.50	0.152
Alkalinity ($CaCO_3$)	26.0	0.520	24.0	0.480	32.0	0.640	34.0	0.680
Sulfate (SO_4)	8.0	0.166	6.0	0.125	6.0	0.125	7.0	0.146
Chloride (Cl)	5.0	0.141	4.0	0.113	5.0	0.141	4.0	0.113
ΣCations =	0.742		0.882		0.796		0.566	
ΣAnions =	0.827		0.718		0.906		0.938	
% Difference =	5.46		10.3		4.46		24.7	
Hardness =	15.0		24.0		27.0		18.0	

TABLE O-4b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 5, AUG. 13-16, 1979

Ionic Species	Station 08		Station 09s		Station 09b		Station 10s	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	6.5	0.324	5.0	0.250	4.7	0.235	5.9	0.294
Magnesium (mg)	1.5	0.123	1.5	0.123	1.5	0.123	1.6	0.132
Potassium (K)	1.9	0.049	2.0	0.051	1.8	0.046	2.1	0.054
Sodium (Na)	7.00	0.305	7.80	0.339	6.50	0.283	7.50	0.326
Alkalinity ($CaCO_3$)	32.0	0.640	27.0	0.540	27.0	0.540	27.0	0.540
Sulfate (SO_4)	6.0	0.125	6.0	0.125	5.0	0.104	5.0	0.104
Chloride (Cl)	3.0	0.085	4.0	0.113	4.0	0.113	4.0	0.113
ΣCations =	0.801		0.763		0.687		0.806	
ΣAnions =	0.849		0.778		0.757		0.757	
% Difference =	2.95		9.28		4.86		3.15	
Hardness =	22.0		18.0		17.0		20.0	

Ionic Species	Station 10b		Station 11s		Station 11b		Station 12	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	5.8	0.289	8.4	0.419	6.8	0.339	10.5	0.524
Magnesium (mg)	1.5	0.123	1.6	0.132	1.6	0.132	1.1	0.090
Potassium (K)	1.9	0.049	1.8	0.046	1.7	0.044	0.2	0.005
Sodium (Na)	7.00	0.305	5.60	0.244	5.80	0.252	1.50	0.065
Alkalinity ($CaCO_3$)	27.0	0.540	29.0	0.580	27.0	0.540	37.0	0.740
Sulfate (SO_4)	4.0	0.083	4.0	0.083	5.0	0.104	<1.0	0.021
Chloride (Cl)	4.0	0.113	4.0	0.113	3.0	0.085	3.0	0.085
ΣCations =	0.766		0.840		0.767		0.685	
ΣAnions =	0.736		0.776		0.729		0.845	
% Difference =	1.99		3.98		2.55		10.5	
Hardness =	20.0		26.0		23.0		30.0	

TABLE O-4c

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 5, AUG. 13-16, 1979

Ionic Species	Station 13s		Station 13b		Station 14		Station 15s	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	17.6	0.878	17.5	0.873	32.3	1.61	18.0	0.898
Magnesium (mg)	1.4	0.115	1.5	0.123	0.8	0.066	1.5	0.123
Potassium (K)	1.1	0.028	1.3	0.033	0.5	0.013	1.2	0.031
Sodium (Na)	3.70	0.161	4.00	0.174	2.40	0.104	3.70	0.161
Alkalinity ($CaCO_3$)	61.0	1.22	63.0	1.260	101.0	2.020	64.0	1.280
Sulfate (SO_4)	1.0	0.021	1.0	0.021	<1.0	<0.021	2.0	0.042
Chloride (Cl)	4.0	0.113	4.0	0.113	3.0	0.085	4.0	0.113
ΣCations =	1.182		1.203		1.793		1.213	
ΣAnions =	1.354		1.394		2.126		1.434	
% Difference =	6.75		7.31		8.50		8.36	
Hardness =	48.0		48.0				49.0	

Ionic Species	Station 15b		Station 16		Station 17		Station 18	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	19.7	0.983	16.9	0.843	18.3	0.913	8.4	0.419
Magnesium (mg)	1.7	0.140	1.3	0.107	1.2	0.099	1.9	0.156
Potassium (K)	1.4	0.036	1.3	0.033	1.3	0.033	2.1	0.054
Sodium (Na)	4.70	0.204	4.20	0.183	4.50	0.196	7.40	0.322
Alkalinity ($CaCO_3$)	63.0	1.260	63.0	1.260	63.0	1.260	36.0	0.720
Sulfate (SO_4)	1.0	0.021	1.0	0.021	2.0	0.042	5.0	0.104
Chloride(Cl)	5.0	0.141	5.0	0.141	4.0	0.113	4.0	0.113
ΣCations =	1.363		1.166		1.241		0.951	
ΣAnions =	1.422		1.422		1.414		0.937	
% Difference =	2.11		9.88		6.54		0.752	
Hardness =	54.0		46.0		49.0		28.0	

TABLE O-4d

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 5, AUG. 13-16, 1979

Ionic Species	Station 19		Station		Station		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	7.6	0.379						
Magnesium (mg)	1.5	0.123						
Potassium (K)	1.7	0.044						
Sodium (Na)	6.00	0.261						
Alkalinity ($CaCO_3$)	37.0	0.740						
Sulfate (SO_4)	5.0	0.104						
Chloride (Cl)	4.0	0.113						
ΣCations =	0.807							
ΣAnions =	0.957							
% Difference =	8.49							
Hardness =	24.0							

Ionic Species	Station		Station		Station		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)								
Magnesium (mg)								
Potassium (K)								
Sodium (Na)								
Alkalinity ($CaCO_3$)								
Sulfate (SO_4)								
Chloride(Cl)								
ΣCations =								
ΣAnions =								
% Difference =								
Hardness =								

TABLE 0-5a

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 7, DEC. 3-6, 1979

Ionic Species	Station 01		Station 02		Station 03		Station 04	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	2.6	0.130	3.2	0.160	2.9	0.145	2.8	0.140
Magnesium (mg)	1.2	0.099	1.0	0.082	1.2	0.099	1.3	0.107
Potassium (K)	2.1	0.054	2.4	0.061	2.2	0.056	2.3	0.059
Sodium (Na)	5.90	0.257	4.50	0.196	4.40	0.191	6.70	0.291
Alkalinity ($CaCO_3$)	16.0	0.320	15.0	0.300	16.0	0.320	17.0	0.340
Sulfate (SO_4)	6.0	0.125	6.0	0.125	7.0	0.146	8.0	0.166
Chloride (Cl)	4.0	0.113	5.0	0.141	5.0	0.141	5.0	0.141
ΣCations =	0.539		0.499		0.491		0.597	
ΣAnions =	0.558		0.566		0.606		0.647	
% Difference =	1.7		6.3		10.5		4.06	
Hardness =	11.0		12.0		12.0		12.0	

Ionic Species	Station 05		Station 06		Station 07		Station 08	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	2.4	0.120	2.9	0.145	5.5	0.27	2.3	0.115
Magnesium (mg)	1.3	0.107	1.4	0.115	1.0	0.082	1.1	0.090
Potassium (K)	2.2	0.056	2.1	0.054	2.1	0.054	2.1	0.054
Sodium (Na)	7.00	0.305	6.50	0.283	7.20	0.313	5.80	0.252
Alkalinity ($CaCO_3$)	18.0	0.360	19.0	0.386	18.0	0.360	18.0	0.360
Sulfate (SO_4)	10.0	0.208	8.0	0.166	9.0	0.187	9.0	0.182
Chloride (Cl)	5.0	0.141	4.0	0.113	5.0	0.141	5.0	0.141
ΣCations =	0.587		0.596		0.724		0.511	
ΣAnions =	0.709		0.659		0.688		0.688	
% Difference =	9.4		5.01		2.5		14.8	
Hardness =	11.0		12.0		17.0		10.0	

TABLE O-5b

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 7, DEC. 3-6, 1979

Ionic Species	Station 09		Station 10		Station 11		Station 12	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	2.3	0.115	3.2	0.160	3.6	0.180	18.0	0.898
Magnesium (mg)	1.1	0.090	1.4	0.115	1.2	0.099	0.8	0.066
Potassium (K)	2.3	0.059	2.1	0.054	1.9	0.049	0.8	0.020
Sodium (Na)	5.70	0.248	6.90	0.300	5.80	0.252	3.60	0.157
Alkalinity ($CaCO_3$)	20.0	0.400	19.0	0.380	22.0	0.440	44.0	0.880
Sulfate (SO_4)	9.0	0.187	8.0	0.166	8.7	0.166	<1.0	<0.021
Chloride (Cl)	3.0	0.085	4.0	0.113	5.0	0.141	3.0	0.085
ΣCations =	0.512		0.629		0.579		1.14	
ΣAnions =	0.672		0.659		0.747		0.985	
% Difference =	13.5		2.37		12.7		7.2	
Hardness =	10.0		13.0		13.0		46.0	

Ionic Species	Station 13		Station 14		Station 15		Station 16	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	12.7	0.634	35.0	1.750	10.4	0.519	7.2	0.359
Magnesium (mg)	1.1	0.090	0.6	0.049	1.2	0.099	1.0	0.082
Potassium (K)	1.3	0.033	1.0	0.026	1.6	0.041	1.6	0.041
Sodium (Na)	3.70	0.161	4.80	0.209	4.10	0.178	3.30	0.144
Alkalinity ($CaCO_3$)	60.0	1.200	100.0	2.000	40.0	0.800	35.0	0.700
Sulfate (SO_4)	2.0	0.042	4.0	0.083	3.0	0.062	3.0	0.062
Chloride (Cl)	4.0	0.113	3.0	0.085	5.0	0.141	5.0	0.141
ΣCations =	0.918		2.030		0.837		0.626	
ΣAnions =	1.354		2.168		1.003		0.903	
% Difference =	19.2		3.3		9.0		18.1	
Hardness =	35.0		86.0		30.0		21.0	

TABLE 0-5c

LAKE SEMINOLE WATER QUALITY MANAGEMENT STUDY
MAJOR IONIC SPECIES BALANCE AND TOTAL HARDNESS VALUES
PHASE II, CYCLE 7, DEC. 3-6, 1979

Ionic Species	Station 17		Station 18		Station 19		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)	7.2	0.359	8.7	0.434	7.5	0.374		
Magnesium (mg)	0.9	0.074	1.3	0.107	1.3	0.107		
Potassium (K)	1.9	0.049	2.0	0.051	1.9	0.049		
Sodium (Na)	3.20	0.139	4.70	0.204	4.30	0.187		
Alkalinity ($CaCO_3$)	35.0	0.700	37.0	0.740	35.0	0.700		
Sulfate (SO_4)	2.0	0.042	5.0	0.104	5.0	0.104		
Chloride (Cl)	5.0	0.141	4.0	0.113	4.0	0.113		
ΣCations =	0.621		0.797		0.717			
ΣAnions =	0.883		0.957		0.917			
% Difference =	17.4		9.1		12.2			
Hardness =	21.0		26.0		23.0			

Ionic Species	Station		Station		Station		Station	
	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l
Calcium (Ca)								
Magnesium (mg)								
Potassium (K)								
Sodium (Na)								
Alkalinity ($CaCO_3$)								
Sulfate (SO_4)								
Chloride(Cl)								
ΣCations =								
ΣAnions =								
% Difference =								
Hardness =								